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ABSTRACT

This dissertation is based on the ideas that: (1) metaphor is essential to the conception of and life in organizations; (2) the dominant organizational metaphor of life within universities, particularly from an administrative perspective, is Newtonian/mechanical; and (3) a metaphoric perspective grounded in chaos theory might be helpful in approaching the specific institutional function of planning. Put forward are 10 propositions derived from a coincident consideration of chaos theory--the study of complex, replicated patterns in seemingly random phenomena--and of classic and progressive prescriptions for strategic planning. These propositions include: (1) the ideal outcome of planning is planning, not a plan; (2) planning begins with a distillation of the institution's key values and purposes; (3) the widest possible universe of information should be made available to all members of the institution--this universe includes ongoing, rich, and current feedback; and (4) dissent and conflict are creative, healthy, and real. These propositions were examined in the context of planning experiences at four diverse institutions. The propositions and the descriptive enrichment they received through the case-study database formed an extended metaphor that provided a conceptual coherence for successful practices in strategic planning, and therefore, a general, prescriptive approach or model for institutions embarking on planning efforts. (Contains 133 references.) (GC)

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ED 457 931

A CHAOS-THEORY METAPHOR FOR STRATEGIC PLANNING IN HIGHER EDUCATION: AN EXPLORATORY STUDY

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

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DEDICATION

This dissertation is dedicated with great love to my wife

Carol Tuggle Cutright

and to my daughters

Kyle Margaret Cutright

and

Drew Charlotte Cutright

for their sustaining love, personal sacrifices, and untiring support

ACKNOWLEDGEMENTS

Those who have undertaken any project as daunting as a dissertation know that its crediting to a single individual is a gross understatement of the endeavor. Without the generous support of literally hundreds of people, this effort and my doctoral education would not have been possible. At the risk of substantial omission, I will note a few of these individuals.

My committee members—Dr. Jeff Aper, Dr. Grady Bogue, Dr. Lloyd Davis, and Dr. Mark Mendenhall—have done me the substantial honor of considering my work seriously, and contesting my ideas and expression vigorously when necessary, and thus have made it a better work. The efforts of Jeff Aper in particular, my chair and good friend, have proven indispensable. Further acknowledgement is gratefully extended to the faculty of the College of Education from whom I have taken coursework, and where I experienced nary a class meeting that did not contribute to my growth.

The research perspectives and data collection were greatly enhanced by my Fulbright Scholarship to Canada during 1996-1997. Many individuals could be recognized and thanked for this element of my education, but I note in particular Andrew O'Brien and Deborah Betz, whose financial support of the Fulbright program made my scholarship possible; the various selection and screening committees of the Fulbright program, particularly the committee sponsored by the University of Tennessee, Knoxville; the University of Calgary, my host institution in Canada, and particularly Dean Ian Winchester, Dr. Alice Boberg, and Dr. Bryant Griffith of that university;

Chuck Cantrell and other members of the staff of the Office of University Relations at the University of Tennessee at Chattanooga, who assumed my workload during my scholarship year; and Vincent Pellegrino, former vice chancellor at UTC, who pioneered on my behalf the creation of a new university policy allowing staff members to accept Fulbright and related opportunities on conditions similar to those extended to members of the faculty.

My fellow graduate students, my informal cohort, have proven a source of energy and renewal when times have been tough. Most particularly but not exclusively, I think of Judy Fry and Ruth Liu.

Those individuals who allowed me access to their thoughts during the conduct of the case study research are, by necessity, largely anonymous. But they are not so to me, and I take instruction from each of them on the necessity of nurturing and supporting academic inquiry without personal benefit.

My wife, Carol, and my daughters, Kyle and Drew, have endured long stretches of my absence from home, my continuous distraction toward the arcane, and a constant drain on finances for this critical book or that. I love them dearly.

Finally, my parents, William Emil Cutright and June Marie Cutright, had minimal formal educations but a dedication to education they invested in me. They had very little but gave me everything. I miss them.

ABSTRACT

This dissertation study is based in the ideas that metaphor is essential to our conception of and life in organizations; that the dominant organizational metaphor of life within universities, particularly from an administrative perspective, is Newtonian/mechanical; and that a metaphoric perspective grounded in chaos theory might be helpful to us in approaching the specific institutional function of planning.

Put forward are ten propositions derived from a coincident consideration of chaos theory, and of classic and progressive prescriptions for strategic planning. These propositions are then examined in the context of planning experiences at four diverse institutions: Blue Ridge Community College of Virginia, Carson-Newman College of Tennessee, Red Deer College of Alberta, and the University of Calgary. The propositions and the descriptive enrichment they receive through the case-study database form an extended metaphor which provides a conceptual coherence for successful practices in strategic planning, and therefore a general, prescriptive approach or model for institutions embarking on planning efforts.

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CHAPTER I

INTRODUCTION TO THE STUDY

Background to the Study

Marshall and Rossman (1995) list some 20 standards by which one might be able to judge qualitative research. Among these standards, the authors stress the importance of an initial period in which "a problem focus was generated from observation, not from library research" (p. 147)

For me, the "initial period" wasn't a pointed moment of insight or inquiry, but rather an extended period of experience and informal observation, during which a discomfort emerged and became increasingly a vexation. As an individual engaged now and for nearly two decades in the administrative support field of "institutional advancement," I have specialized in the public relations of higher education. It is a vantage point upon which is continually pressed the reality of circumstances, trends, and competitive pressures external to the institution. Additionally, a key responsibility of the role is the need to maintain ongoing awareness of the institution's strengths—and limitations.

Coincidentally concurrent with my own career in education has been the period of the development and advancement of the concept of "strategic planning." A more extended definition of the term will be offered later, but suffice it for now to use one concise definition advanced by higher education writer and theorist George Keller (1983): "Strategic planning means the formulation of succinctly stated operational aims" (p. 141).

Noted earlier was the emergence for me of a discomfort turning to vexation in my experience; it has been largely centered around the way several higher education institutions, systems, and governing boards within my experience have approached the future and have conducted their strategic planning. A composite of common (and questionable) practices and approaches within this experience might yield a pattern of planning that might be characterized as "pattern A":

- Planning is occasioned by, and executed to accede to and meet minimally, the mandates of external agencies, such as governing boards, state legislatures, or accrediting agencies.
- Planning is periodic, episodic, and discontinuous.
- Planning is based largely on sketchy and limited information, most of it confined to statistical data. This information is gathered from predesignated sources high on the organizational chart, and gathered along customary chains of command.
- Planning is averse to open, lively, and contentious discussions of the institution's core purposes and priorities.
- Planning is directed and controlled to a very high degree by the institution's chief executive officer.
- Planning is based largely on the idea that a sufficient quantity of information on current conditions and trends will yield an accurate prediction of future conditions.
- Planning yields end documents that are highly detailed, long-range, and sequential.
- Planning is dedicated to a full allocation of resources based on these predictions, if there is, in fact, any connection between the planning and budgeting processes.

What if one were to consider a strategic planning process based on principles virtually oppositional to each of these conditions? That might yield a "pattern B" of planning:

- Planning is driven by the institution's desire to identify and develop its potential.
- Planning is continuous.
- Planning is open to a broad range of opinion, information, aspiration, and argument from throughout the broadly defined constituency of the institution.
- Planning is focused on the priority of articulating, concisely, the institution's core purposes and priorities.
- Planning is energized and legitimized, but only generally directed, by the chief executive officer.
- Planning yields a plan that points a direction, but that is not overly detailed and is not overly dependent upon tight timeframes or precise sequencing.
- Planning allows for the pursuit of opportunities which may arise in the future but are not currently foreseen.

Such a planning process would be highly consistent with some of the most current, progressive, and successful practices of contemporary higher education planning. Some of these progressive views would include Marvin Peterson's (1997) idea of contextual planning, which he proposes as a more proactive, holistic advance upon conventional strategic planning; Anna Neumann and R. Sam Larson's (1997) emphasis on widely distributed leadership that rejects conventional "linear" leadership and instead draws upon existing institutional patterns, values and "emerging theory" (p. 198); and Ellen Earle Chaffee and Sarah Williams Jacobsen's (1997) foci on the criticality of identifying subtle organizational imperatives, of building a shared vision through trust and mutual understanding, and of opening the planning process to seeming, initial disorder.

These practices are, in large, complementary of and compatible with interpretations of social system dynamics which have followed from metaphoric extensions of chaos theory to social systems. Chaos theory, first articulated within physical sciences, is essentially a collection of principles concerning patterns of order in apparent disorder, the disproportionate effect of small influences on systems, and the lack of predictability in those systems. These are broad characteristics, as well, of complex human organizations, such as colleges and universities. These similarities of patterns and behaviors, between physical and social systems, give rise to a chaos-theory-derived metaphoric description of the organization, and specifically, for this study, of strategic planning in higher education.

The importance of metaphor in our conceptions of the world and our organizations should not be underestimated or considered a mere poetic tool of discussion. Since at least the time of Plato's allegory of the cave, metaphor has played a significant role in our descriptions of the world around us. Philosopher Mark Johnson and linguist George Lakoff, in their collaborative *Metaphors We Live By* (1980), assert that metaphor is inseparable from our conceptualizations of the world and our organization of it:

> [M]etaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which

> we both think and act, is fundamentally metaphorical in nature (p. 1).

Further,

> We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor (p. 158)

A metaphor for an organization or its processes, then, has utility for shaping our very conceptions of the organization. As Gareth Morgan wrote in the first edition of his book, *Images of Organization*:

> Metaphor is often just regarded as a device for embellishing discourse, but its significance is much greater than this. For the use of a metaphor implies a way of thinking and a way of seeing that pervade how we understand our world generally.... [M]etaphor exerts a formative influence on science, on our language and on how we think, as well as on how we express ourselves on a day-to-day basis (1986, pp. 12-13).

Morgan (1986, 1997) note that the use of multiple metaphors is critical to a fuller understanding of our organizations. Any particular metaphor has power to disclose knowledge of our organizations not otherwise readily accessible, while at the same time, the same metaphor can, by directing our attention to certain elements, distract us from other ways of knowing or understanding our organizations. Morgan and many other knowledgeable analysts of organizational life (e.g. Wheatley, 1992; Zohar, 1997), as well as researchers in education (e.g. Lincoln and Guba, 1985) conclude and acknowledge that the dominate metaphoric framework for organizations in the 20th century has been Newtonian/mechanical (the machine-like predictability and replicability of actions and chain-of-command), with the benefits of Cartesian separability and isolated consideration of organizational units and functions. Frederick Taylor's "scientific management" of the early

20th century (Taylor, 1911) based much of its claim to legitimacy in the scientific methodology of logical positivism and in physics isolated from subjective contexts.

If we accept that 1) metaphor is central to our conceptions of organizations, and that 2) Newtonian/mechanical metaphors are precedent and dominant to this day in our conceptions of organizations, then Newtonian/mechanical metaphors are our default conceptions of organizations. That is to say, in the absence of the articulation or consideration of another metaphoric framework, we and those with whom we work are almost certain to consider organizations heavily or exclusively within machine-similar frameworks, with the attendant strengths—and weaknesses—of those metaphors.

It is fairly ironic that the management and organization ideas and ideals of engineers Frederick Taylor and Henri Fayol, based in "modern science," were articulated and drew substantial followings at the beginning of the 20th century—just as the nature of "modern science" was changing in radical ways. Taylor's *Principles of Scientific Management* was published in 1911, and Fayol's *Administration Industrielle et Générale* was published in 1916. Meanwhile, Albert Einstein in 1916 wrote the preface to the first edition of his *Relativity: The Special and General Theory* (Einstein, 1961; Pugh and Hickson, 1997). Oxford University physicist and philosopher of science Danah Zolar would later call relativity , with quantum mechanics, chaos, and complexity theory, "the four new sciences of this century" (1997, p. 42). Emerging ideas of science and the physical world were weakening or limiting the very foundation of the 19th-century-science-derived metaphor.

Both for theory and practice, a developed metaphor of the organization, in this case higher education and its planning processes, as an entity similar to physical systems subject to the principles of chaos theory, can have far-reaching implications beyond those suggested by the specific questions and propositions of this study. An articulated metaphor of chaos theory and strategic planning might have not only descriptive merits, but prescriptive utility, in directing, maintaining, and evaluating strategic planning processes.

The implications of chaos theory for organization description and perhaps prescription have enjoyed broad interest in the business organizational community since the 1992 book by Margaret Wheatley, *Leadership and the New Science*. Wheatley took many of the concepts of "new science," particularly chaos theory as it had been described and considered in more limited social contexts by authors such as James Gleick (*Chaos: Making a New Science*, 1987) and considered them within specific organizational context and functions.

Wheatley describes at length the Newtonian/mechanical characteristics and metaphor that dominate our organizational thinking. Organizations, and the organization of knowledge itself, has been marked by the "reduction into parts and the proliferation of separations." We have focused our organizational energies on

> structure and organizational design, on gathering extensive numerical data....We believed that we could study the parts...to arrive at knowledge of the whole. We have reduced and described and separated things into cause and effect, and drawn the world in lines and boxes (pp. 27-28).

Wheatley addresses the issue and practice of planning specifically:

> We've been planning and predicting, analyzing the world. We've

> held onto an intense belief in cause and effect. We've raised planning to the highest of priestcrafts, and imbued numbers with absolute power (p. 26).

Gareth Morgan's work has focused largely on the value and variety of metaphor within organizations. It's notable that the 1997 2nd edition of his landmark *Images of Organization* gives more attention than the original both to the centrality of metaphor and to the emerging conceptual and analytical framework of chaos and complexity theories. Morgan, while advancing the importance of metaphor, stresses their internal and general limitations. Morgan's "machine" metaphor, which he holds to be the dominant one of our culture, has particular strengths when the approach is applied within organizational activity. Organizations-as-machines works well when the task is straightforward, when the environment is stable, when the product is uniform, when precision is at a premium, and when the "human 'machine' parts are compliant and behave as they have been designed to do" (1997, p. 27).

But the "severe limitations" of this Newtonian/mechanical construct can include the creation of organizations unadaptable to changing circumstances, the growth of "mindless and unquestioning bureaucracy," the undesirable consequences of the interests of individuals being at conflict with goals the organization is designed to achieve, and the "dehumanizing effects upon employees," particularly those low on the organizational chart (p. 28).

Morgan's 1997 treatment of chaos and complexity theories is not as fully developed as his other metaphoric considerations. But he does see substantial promise for the development and advancement of the metaphor, particularly in enhancing our abilities to rethink what me mean by organization and what roles hierarchy and control have in those reconceptions, manage changing contexts as an "art," learn the use of small changes to create large effects, and live "with continuous transformation and emergent order as a natural state of affairs" (p. 266).

Oxford physicist and philosopher of science Danah Zohar, in her 1997 *ReWiring the Corporate Brain: Using the New Science to Rethink How We Structure and Lead Organizations*, sees an organizational world of "Newtonian organizations...that thrive on certainty and predictability ....Power emanates from the top....[Such organizations] are managed as though the part organizes the whole." The emphasis on control and command "isolates these organizations from their environments. They don't interact with or respect those environments, including the people who work with them" (p. 5).

Zohar holds that the organization so constructed cannot derive maximum benefit or participation from its members. She holds as well that Maslow's hierarchy of needs, although helpful within limited contexts, when strictly applied gives "the false impression that we can rank and separate physical, personal, social, and spiritual needs. Human beings are more holistic than that....The need for meaning is primary" (p. 18). This is a view she holds with many writing from different perspectives, such as that articulated by Viktor E. Frankl in *Man's Search for Meaning* and his advocacy of logotherapy (1946, 1984).

Zohar further asserts an analogy between the alienation experienced by individuals in control-command-heavy organizations, and Von Foerster's Theorem from the field of cybernetics: "The more rigidly connected are the elements of a system, the less influence they will have on the system as a whole. The more rigid the connections, the more each element of the system will exhibit a greater degree of 'alienation' from the whole" (p. 49).

Michael G. Dolence and Donald M. Norris are the authors of 1995's *Transforming Higher Education: A Vision for Learning in the 21st Century.* It is an influential work among academic planners and a featured publication within the Society for College and University Planning. Dolence and Norris describe both the processes and organizations of higher education as being of "classic, late Industrial Age design," a "factory model" characterized by "insufficient flexibility," a fixation on processes rather than outcomes, and "high costs" (p. 11). The authors advocate institutional planning and transformation based on a loop feeding back to itself (reminiscent of Senge, 1990) of realignment, redesign, redefinition, and reengineering.

This dissertation study is not the first effort to consider strategic planning in higher education against a background of chaos theory. When the Virginia Commission on The University of The 21st Century issued its report, "The Case for Change," a report produced in charge from the governor and the state legislature, the report's "organizing metaphor was deterministic chaos," according to one of commissioners and one of the two primary authors of the report, Gordon K. Davies (1997, p. 7). The metaphor of chaos theory is implicit throughout the text, but explicit in the chaos-theory-formulae, computer-generated, somewhat abstract illustrations throughout the report. A notation in the report (Virginia Commission, 1989, inside back cover) says of use of this metaphor:

> A mathematical concept called, somewhat misleadingly, "chaos," holds that at certain points small changes within systems will produce great and unpredictable results....The mathematics created to conceive..."chaotic" situations is non-linear: the future does not follow

> trends established in the past....What [chaos theory] represents to us is the probability that the future will not be simply a linear extrapolation of the past, that small events happening today will cause new patterns to emerge downstream.

The report can easily be perceived on first glance as different than most commission and planning reports from higher education. It has no charts or graphs of data, no linear projections of historic, numerical trends. Rather, it speculates in fairly broad terms about the Virginia and world of the 21st century, and suggest ways that higher education could and should adapt to those changes for the best advantage of the state and its citizens. It talks about new relationships, among faculty and institutions, students and faculty, institutions and society, colleges and universities, technological fields and the liberal arts. The report was very well received by Governor Baliles; he called Davies at 2:00 a.m. one morning after finishing the report (G. K. Davies, personal communication, April 15, 1998).

The staff director for the Virginia report, Anne Pratt (now Anne Moore) indicated (personal communication, April 22, 1998) that the commissioners set out to create a document different than those of the past. "We had cabinets full of data, full of stuff. At some point, the commissioners said, 'This isn't about numbers. This is about a vision.' She adds, "What we were involved in was imagination. We encouraged commissioners to read science fiction."

Moore and Davies were familiar with chaos theory, from outside readings, but the metaphoric framework was not well developed, in 1989, in general business or organizational-theory circles. Thus the approach through chaos is implicit, and other than the illustrations, endnotes, and marginal quotes, chaos is not an explicit reference within the report. "An explicit metaphor would have imposed more structure on the discourse than was there," said Moore. "and we didn't want to get stuck in the notion that 'chaos' was 'bad.' We didn't want to force the metaphor. But it did help people to understand that something different was coming. It helped us think outside the box."

The reception for the report was generally positive, said both Moore and Davies. But that positive response was not universal. "A dean came into my office flapping the report in the air," said Moore. " 'Anne, how could you do this? Higher education isn't about change, it's about permanence!' This report threatened every notion of his about higher education." And a subsequent administration in the governor's mansion would not only reject the reports recommendations, according to Davies, but would be the same administration to later force him from his directorship of the state commission on higher education.

This study, then, is in some respects descended from the Virginia effort, possibly the prototype strategic planning effort in higher education to utilize a chaos-theory metaphor. But this study benefits from the fact that in the intervening decade, substantially more has been published about chaos theory, about possible social applications of chaos theory, and about strategic planning in higher education from a progressive perspective recognizing the limitations of linear forecasting.

Purpose of the Study

The study investigates, and endeavors to confirm or revise as the research findings have suggested, a set of descriptive propositions about strategic planning in higher education. Inasmuch as the study draws together diverse ideas from many sources and attempts to make a cohesive whole of them under a metaphoric frame, the research is best characterized as exploratory. It attempts to ascertain some real-world relevance for a metaphor drawn from physical and social sciences, from abstraction and experiences.

More specifically, I put forth a a set of propositions, drawing them from a variety of sources, but primarily from the literature of higher education strategic planning and of social applications of chaos theory. I examined these propositions against the experience of participants in planning processes at four different colleges and universities.

This work, particularly in its construction of a practice-specific metaphor of chaos theory in planning, may also be considered as within the definition of the "scholarship of integration," as advanced by the Carnegie Foundation for the Advancement of Teaching. *Scholarship Assessed: Evaluation of the Professoriate* (Glassick, Huber & Maeroff, 1997) for example, offers this definition (p. 9):

> The scholarship of integration makes connections within and between the disciplines, altering the contexts in which people view knowledge and offsetting the inclination to split knowledge into ever more esoteric bits and pieces....The scholarship of integration...seeks to interpret, draw together, and bring new insight to bear on original research.

It is my intention that the study contribute to strategic planning in higher education by the description of effective practices which might be emulated, or ineffective practices that might be avoided, within specific cases. Description of these practices, then, should have prescriptive utility for others engaged in strategic planning.

Research Questions

The essential research questions are:

1. Does a descriptive model of strategic planning in higher education, a model derived from a metaphoric application of chaos theory, help us to better understand and conceptually organize the practice of strategic planning?

2. Does the metaphoric model find support or descriptive enrichment within actual strategic planning practice?

3. Does the metaphoric model, examined and refined through case study, have utility as a set of recommendations for productive practice in strategic planning?

Significance of the Study

The study has significance among broader efforts to explore and adapt chaos theory, on metaphorical or analogical levels, to various social system considerations, including, among others:

- economics (Parker & Stacey, 1994; Jaditz, 1996),
- political science and government (Kiel, 1994; C. Brown, 1995; T.A. Brown, 1996, McBurnett, 1996)
- general management and organizational behavior (Loye & Eisler,

1987; Freedman, 1992; Stacey, 1991, 1992, 1996; Wheatley, 1992, 1994a, 1994b; Priesmeyer, 1992; Platje & Seidel, 1993; Svyantek & DeShon, 1993; Begun, 1994; Covey, 1994; Thiétart & Forgues, 1995; Overman, 1996),

- planning (Priesmeyer & Davis, 1991; Cartwright, 1991; Levy, 1994; Levin et al., 1995; Cutright, 1996, 1996-1997; Shipengrover, 1996), and
- education administration (Sungaila, 1990; Griffiths et al., 1991; Hunter, 1995).

Theoretical significance also derives from an incidental examination and reconsideration of some major theoretical frameworks in higher education and educational planning. For example, two major, classical frameworks for the consideration of educational administration are "garbage can" decision making in an "organized anarchy" (Cohen, March & Olsen, 1972; Cohen & March, 1974), and a framework following in some part from that concept (Pugh & Hickson, 1997), Weick's theory of "loose coupling" (1976). Among the theses of these approaches is that decision-making in higher education, and the subsystem of planning, are decentralized and only incidentally reflective of any central direction.

Such schema have been, in the planning and organization literature of the '80s and '90s, posited as oppositional to genuine strategic planning and the kind of administrative control necessary to move institutions in determined directions (Keller, 1983; Walford, 1987; Orton & Weick, 1990; Bergquist, 1992; Newton, 1992). A chaos-theory-informed view of strategic planning offers a creative reconciliation, a recognition for the vitality of the coexistence, of the "two cultures" of academic and administrative mindset (Newton, 1992) suggested by these didactics.

The significance for practice of the case-study support of these propositions, in part or in whole, is tied in large to the metaphoric utility of chaos theory for strategic planning that might be suggested by this research. The propositions--a tentative set of conjectures suggested by contemporary strategic planning literature, by the root principles of chaos theory within physical systems, and by previous social-system considerations of chaos theory--largely follow from the citation and recombination of principles from other authors. But while this study will owe much to the thinking of several authors and practitioners of planning, it is not consistent in whole with any previously articulated view, and thus intends to establish, describe, and evaluate a new conceptual framework for practitioners of strategic planning.

Delimitations of the Study

The study is restricted to a case-study investigation of the experiences of individuals within four institutional contexts. These institutions are diverse in nature, institutional governance, level of degree-granting authority, and geographic distribution. Institutionally generated documents, the opinions of those outside the institutions but knowledgeable about them, and other sources have been considered. But the main focus of the research has been semi-structured and open interviews conducted with individuals within the institutions and participant in their respective planning processes. Given that the spring of 1997 is the temporal focal point of this research, the investigations are more "snapshot" than time-longitudinal in nature. However, documents provided an historical, institutional context for the planning conditions extent in the spring of 1997, and participants themselves were able to draw upon their experiences in the planning processes for some perspective over time.

I did not intend through the development and testing of the model to write a how-to manual for strategic planning, a blueprint of structure, actions, and timetables that might be superimposed upon any or a variety of institutions. The research will describe elements which may have utility for planners, but the circumstances of colleges and universities and their planning circumstances are so very diverse that such prescriptive applications will necessarily be selective and situational.

Limitations of the Study

The primary, potential limitation may be summarized with the proverb: To a man with a hammer, every problem is a nail. That is, to an investigator with a "model," there may be presumed a prejudice for the confirmation of that model, to the exclusion from investigation or reporting that evidence which would not tend to confirm the model. Yin (1994), Marshall & Rossman (1995), Patton (1990), and Lincoln & Guba (1985) are among the qualitative research authors who address these and related issues.

Yin, however, argues (1994, p. 13) that a "prior development of theoretical propositions to guide data collection and analysis" is a benefit to a case study inquiry. "For case studies, theory development as part of the design phase is essential, whether the ensuing case study's purpose is to develop or to test theory," Yin holds (p. 27). "[T]heory development prior to the collection of any case study data is essential in doing case studies," Yin goes on, so as to create a "sufficient blueprint" for the study" (p. 28).

Among the practices that are utilized to minimize this limitation of confirmation bias are an open sharing of assumptions with elite (experienced or highly qualified) interview participants so that they may have the opportunity to critique the elements of the model; an active search for interview subjects with broadly divergent views on the planning processes; and the seeking, recording, and reporting of findings which would tend not to confirm the model (Miles & Huberman, 1994).

Metaphor itself is a limitation, simultaneously with its utility. Morgan's various metaphoric descriptions of organizations are not presented in a hierarchy, or progressively, but alternatively. His work is, he wrote, based on the "very simple premise...that all theories of organization and management are built on implicit images or metaphors that lead us to see, understand, and manage organizations in distinctive yet partial ways" (1997, p. 4) He expands upon the "partial" nature of metaphor: "We have to accept that any theory or perspective that we bring to the study of organization and management, while capable of creating valuable insights, is also incomplete, biased, and potentially misleading" (1997, p. 5). Lakoff and Johnson (1980) write that the acceptance of a metaphor forces us to "focus *only* on those aspects of our experience that it highlights," leading us to "view the entailments of the metaphor as being *true*" (p. 157, highlights from the original.) But even as they acknowledge these limitations of metaphor, Lakoff and Johnson write that "questions of truth" are less important than those of "appropriate action":

> In most cases, what is at issue is not the truth or falsity of a metaphor but the perceptions and inferences that follow from it and the actions that are sanctioned by it. In all aspects of life...we define our reality in terms of metaphor and then proceed to act on the basis of the metaphors (p. 158).

To the degree that the propositions of this study may contribute to actual practice, the goal is not "truth" but "appropriate action."

Definition of Terms

1. "Chaos theory" refers to a set of principles describing the dynamics of nonlinear systems, originally articulated in physical and natural sciences, but finding increased application or metaphoric value within social sciences. The main constructs of this set of principles are that seemingly random phenomena are in fact complexly ordered, that small perturbations in a system may (or may not) be amplified in effects, and that the long-range predictability of the state of systems is very limited. The particular elements of chaos theory to be used in this research will be detailed as part of the literature review.

It should be noted that chaos theory is not a precise, limited set of principles, and that not all principles of chaos theory are purported to be operational in all systems to which chaos theory has been attributed (Gleick, 1987; Kiel & Elliott, 1996). Further "chaos theory" is sometimes subsumed under, sometimes used interchangeably with, the term "complexity theory" (or "theories") (Waldrop, 1992; Horgan, 1996). A deliberate decision has been made to use chaos theory and its terminologies rather than the complexity alternatives, despite the general drift in recent years in relevant social science writing from chaos theory to complexity theory as a framework. (Note, for example, the temporal flow of a selection of Ralph Stacey's writings in management: 1991's *The Chaos Frontier: Creative Strategic Control for Business*; 1992's *Managing the Unknowable: Strategic Boundaries Between*

Order and Chaos in Organizations; 1994's *Chaos, Management and Economics* (with David Parker); and finally, 1996's *Complexity and Creativity in Organizations.*)

The use of chaos theory as a framework has exposed writers to criticisms centering on the supposed inapplicability of chaos-theory principles from natural sciences, in which such principles are largely defined mathematically, to social systems, where mathematical verification is more problematic or impossible (Faber & Koppelar, 1994; Johnson & Burton, 1994; Hunter & Benson, 1997). Complexity frameworks, less specifically defined and conceptually unified, have sidestepped some of the calls for mathematical precision (Horgan, 1996). But the varied definitions (or lack of definition) of complexity also means that it has not developed the rich, common vocabulary of chaos theory, a vocabulary which allows greater discussion of analogs across various systems and disciplines.

Edward Lorenz, one of the founders of chaos theory, offered a further distinction between chaos and complexity, one useful for this study. Lorenz (1993) referred to complexity as irregularity in space, and to chaos as irregularity in time. Certainly the study of higher education has elements of "spatial" dimension, e.g. the structure of planning committees, or the strength of various constituencies and their agendas. But the overriding dimension of interest in planning is time, namely the ability to anticipate, predict, or manipulate the future.

Institutions involved in "genuine strategic planning" are the focus of this study. Both of the key elements of this phrase--genuine and strategic--derive from George Keller's 1983 *Academic Strategy: The Management Revolution in American Higher Education,* which remains the landmark work in the field.

2. "Strategic" planning is only slightly less problematic than chaos theory for definition: who would volunteer that his planning process is "nonstrategic"? But the definition in this case will be taken from Keller (1983), who distinguishes strategic planning from

> mechanical and deterministic long-range planning....Strategic planning deals with a new array of factors: the changing environment, competitive conditions, the strengths and weaknesses of the organization, and opportunities for growth (p. vii).

Keller also gives further operational definition to strategic planning by developing at length six characteristics which identify a strategic process (pp. 143-152). Summarized and paraphrased, these six characteristics are:

- An institution is active, not passive, about its position in history.
- Strategic planning looks outward and is in step with the changing external environment.
- Academic strategy is competitive, recognizing that the institution operates in an environment of increasing competition and economic market sensitivity.
- Strategic planning concentrates on decisions, not documented plans, analyses, forecasts, and goals. It is oriented to action.
- Strategic planning is a blending of quantitative and qualitative factors. It is therefore participatory and highly tolerant of controversy.
- The fate of the institution is the concentration above all other considerations.

3. "Genuine" is used as a selection criterion as opposed particularly to

"successful." Who is to say how--and when--a plan might be determined to be successful? Even if the economic, enrollment and other indicators of an institution's health are in decline after the implementation of a planning process, it's possible that the planning process might have lessened the decline. Likewise, some institutions with no plans might stumble into prosperity due to positive external factors, such as a burgeoning local population base from which to draw enrollment. "Genuine," therefore, as defined by the presence of Keller's six criteria for strategic planning, has been used as an initial case-study selection criterion. This presence was determined by both my evaluation based on a preliminary examination of planning documents and history, and upon the formal acknowledgment, by the respective institutional presidents or chief planners, of the importance and presence of the six criteria in the local planning process. The confirmation of this presence of the conditions which constitute genuine planning, however, is an appropriate subtext of the research. Indeed, in one of the cases, a pivotal situation is the detioration, during the study, of conditions necessary to ascertain good planning practice as prescribed by Keller.

CHAPTER II

REVIEW OF THE LITERATURE

Strategic planning in higher education received an early definition and a strong boost from George Keller with the publication in 1983 of *Academic Strategy: The Management Revolution in American Higher Education.* The author later estimated that while no more than a dozen of 3400 colleges and universities nationwide were engaged in strategic planning at the time of the book's publication, a decade later perhaps a quarter of those institutions were engaged in strategic thinking and acting. Yet he also acknowledged that a considerable number of initial efforts had failed (Keller, 1993). Jones (1990) was more pointed. His estimate was that for every three institutions which had initiated a planning process in the 1980s, two had fallen away from it and had gone back to "business as usual" (p. 52). A study published in 1994 by the American Council on Education (Schuster et al.), inspired by Keller's work and seeking to examine the state of strategic planning as evidenced on eight campuses Keller had originally studied, found mixed results from strategic planning efforts and some outright failure.

Strategic planning enjoys a longer and more storied history in the corporate setting than in higher education, and so Henry Mintzberg's publication in 1994 of *The Rise and Fall of Strategic Planning* is of interest. The book is essentially a meta-analysis of studies on strategic planning and its widespread disappointments in the corporate world. Mintzberg suggested that the mid-90s were an appropriate time for the publication of the book and his prescriptions for strategic planning's revival. Had he published earlier, he felt, his points might well have been lost in the 1980s' backlash against strategic planning.

Of course, considerations of the limitations, failures, and cultural conflicts of planning and related issues within higher education predate Keller and the economic conditions of the 1980s which pressed consideration of institutions' market placements. Cohen and March, in their 1974 classic *Leadership and Ambiguity,* noted that the many presidents they interviewed voiced virtually unanimous support for the importance of planning and the idea that central responsibility for such planning resided within the office of the president. Yet Cohen and March determined four categories of answers when these same presidents were pressed for their plans (p. 113):

> 1. Yes, we have a plan. It is used in capital projects and physical location decisions.
> 2. Yes, we have a plan. Here it is. It was made during the administration of our last president. We are working on a new one.
> 3. No, we do not have a plan. We should. We are working on one.
> 4. I think there's a plan around here someplace. Miss Jones, do we have a copy of our comprehensive 10-year plan?

Cohen, March, and Olsen tied such patterns of institutional action and culture into their "garbage can" and "organized anarchy" models of institutional choice and decision making. Problems, solutions, participants, and choice opportunities were conceived and described as a rather random mix given to uneven results and low predictability (Cohen & March, 1974; Cohen, March, & Olsen, 1972).

Karl Weick described educational systems, including universities, as "loosely coupled systems" (1976), reminiscent of Cohen, March & Olsen's "uncoupling of problems and choices" (1972, p. 16) in garbage-can decision making, rather than as tightly controlled, centrally managed organizations. Weick identified advantages to such systems. Loose coupling can allow an organization to be more sensitive to environmental changes and able to adapt to them, as well as having lower administrative costs. Although Weick noted in 1976 that loose coupling "baffled and angered" (p. 4) administrators in their central planning activities and resulting expectations that an organization could be changed by such planning, he later expressed further and more detailed concern that loose coupling had frequently been conceptualized as a diametric opposite to management of organizations and was often cited as a cause of perceived resistance to change (Orton & Weick, 1990). Keller (1983), indeed, considered the conditions of garbage-can decision making and loose coupling to be crises, not elements of flexibility and adaptability, for the then-emerging era of harsh competition for resources.

A framework which might yield prescriptions for more successful strategic planning in higher education is suggested by chaos theory. Chaos theory might affirm prescriptions for successful planning as put forth by Mintzberg, Keller, and others, and may advance our understanding of planning's dynamics, limitations, and potentials.

Following is a brief explanation of chaos theory and some of its main tenets. The researcher then postulates implications for strategic planning that are suggested by a consideration of chaos theory.

Chaos Theory

Chaos, in the physical sciences, is not the random activity that the term's common use suggests. Chaos theory, instead, holds that many seemingly random activities and systems in fact evidence complex, replicated patterns. The behavior of these systems is nonlinear, that is, behavior feeds back upon itself and modifies the patterns. Further, predictability of the system's behavior is restricted to a relatively short time frame.

Chaos theory's roots in science go back more than a century to Henri Poincaré's proof that the gravitational and orbital behavior of bodies in the solar system could not be explained only with simple, Newtonian, linear physics (Hayles, 1990; Ruelle, 1991). But ongoing attention to chaos theory is broadly considered to have begun with the work in more recent decades of MIT meteorologist Edward Lorenz.*

Lorenz had been working on computer models of the weather in order to enhance predictability. In one noted episode from the early '60s, he had entered a number of weather conditions into a simple computer and graphed the resulting weather patterns. He sought to replicate the patterns, but this time rounded the mathematical measurements of weather conditions to three decimal places instead of six. He expected only slight deviations in his findings, and for the two graph patterns to reflect similarities. Instead, after only a few iterations of the computations, the patterns began to vary greatly from initial findings, to the point of no correlation at all. Yet within this seeming randomness, boundaries existed on the behavior of the system, and certain weather patterns recurred. These are conditions which characterize actual weather (Gleick, 1987).

Chaotic functions demonstrate *extreme sensitivity to initial conditions.*

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* Ironically, the Soviets made substantial, independent progress in the advancement of chaos theory after World War II, but much of this research was unknown in the West until there were more exchanges of scientific information made possible by thaws in the Cold War (Gleick, 1987).

Two computer simulations of the solar system were conducted by MIT, each seeking to predict the position of the planets 850 million years in the future. The second simulation varied from the first only by moving each planet's starting position by one-half millimeter. Pluto is the planet most irregular in its solar orbit; the change of just half a millimeter in initial conditions changed Pluto's eventual position between the two simulations by 4 billion miles (Smith, 1995).

Chaotic systems also have *extreme sensitivity to influx.* Following from Lorenz's work, this notion is popularly called *the butterfly effect,* where the flapping of a butterfly's wing in Asia may eventually alter the course of a tornado in Texas (Lorenz, 1993). (This concept varies from extreme sensitivity to initial conditions only in the existence of input at the commencement of observation, or during its course.)

The explanation of the importance of small factors comes through the circumstance that chaotic systems are dependent upon *feedback.* As opposed to Newtonian concepts which more clearly differentiate between cause and effect, feedback is the notion that an effect becomes part of the cause in subsequent *iterations* of the pattern. Depending on the presence and nature of the iterative pattern, small factors can--but not necessarily will--become multiplied over time. Senge (1990) explored this concept as related to organizations in *The Fifth Discipline.*

What, then, allows chaotic systems to develop any sense of pattern, to stay within outer boundaries? It is the existence of *attractors.* Attractors are those elements in a system which have drawing or organizational power. A pendulum swinging in a simple back-and-forth pattern attracts toward gravity and its lowest point, and eventually stops absent the input of additional energy. The presence of multiple attractors, while establishing boundaries on a system, results in unstable, complex patterns, with the attractors acting upon one another, and demonstrating greater sensitivity to influx. It is the presence of attractors that also gives chaotic systems the quality of *self organization*, the ability to recreate order and pattern, at least temporarily, despite continuous compensation for internal and external shocks to the system, or turbulence (Parker & Stacey, 1994).

Chaotic systems demonstrate *self-similarity* at their various levels. In natural systems, self-similar structuring, called *fractals*, is evidenced in cloud formation, plant structure, landscapes, circulatory systems, wherever chaotic organization itself is evidenced. A snowflake is a familiar fractal structure: at ever closer microscopic examination, the basic pattern is continuously repeated (Wheatley, 1992). Schwartz and Ogilvy (1979) described this structural principle as holographic, in which the whole is contained in the part. Wheatley, in *Leadership and the New Science* (1992), an important work on the adaptation of chaos theory to organizations, wrote that "the best organizations have a fractal quality to them. An observer of such an organization call tell what the organization's values and ways of doing business are by watching anyone..." (p. 132).

To summarize, a chaotic system is one in which apparently random activity is in fact complexly patterned. Patterns, created by attractors, are disrupted and modified by the presence or influx of smaller or greater levels of turbulence. Attractors work to keep the system within boundaries. Chaotic systems demonstrate self-similarity, or fractal structuring, at various levels of the system. The infinitely varied interactions of attractors and turbulence make pattern predictability difficult in the near term and impossible over the long term. Despite limited predictability, patterns do emerge and are substantially the creation of system conditions and inputs.

Investigators in fields as varied as astronomy, meteorology, geology, ecology, and quantum mechanics, to name but a few, have verified chaotic patterns and constructed mathematical formulae to describe them (Newman & Wessinger, 1993). Chaos theory in social systems, many of which evidence anecdotal characteristics of chaos, has been more difficult to document, largely because of a lack of quantification methodology. The application of chaos theory principles to such systems remains controversial. But in disciplines such as economics and electoral political science, both of which yield enormous quantities of numbers, chaotic patterns have been confirmed and described in formulae (Gleick, 1987; Priesmeyer, 1992; Brown, 1995; Kiel and Elliott, 1996). If we accept that chaos, though it may be difficult to mathematically document and measure in social systems, has been indicated and critically reviewed in enough social system circumstances to justify the analysis of other systems through its lens, then it is appropriate to consider specific tenets of chaos theory which may have bearing on the dynamics of human organizations and activities.

Propositions of Implication for Strategic Planning

A metaphor, as discussed in Chapter One, is, among other things, an organizational framework for abstractions and ideas. The metaphor may, it follows, bring together disparate ideas, seemingly detached one from the other when viewed through other frameworks. Chapter One also noted in summary some particular metaphoric considerations of chaos theory within social sciences and social systems.

We have reached a juncture where a framework can be initially constructed. From this framework, we can further consider ideas and experiences to see if there is conceptual support and dimension to be lent to the metaphor. From this point forward, we consider the literature not in temporal order, or by discipline domain, but as it contributes to the tentative propositions.

The literature considered here covers a broad territory. It is drawn from, among other sources, classic considerations of strategic planning in higher education, and particularly Keller's work; from strategic planning literature within broader and business contexts; from more recent and progressive views of strategic planning in higher education; and from applications of chaos theory to a variety of social contexts.

It is essential to acknowledge that the propositions of this study can be—and are—derived from a variety of established scholarly perspectives and findings outside of chaos theory. Rather than making the chaos framework superfluous, I contend that these similarities and derivations strengthen the propositions, grounding them in esteemed scholarly and practical experience. The value of the propositions is not to be found so much in their individual verity, but in the overall metaphor, the overarching construct of reality, that they present. It is this metaphor that then gives us an alternative view of planning and organizational reality, a metaphor which is some sense displaces the dominant Newtonian metaphor, and thus allows us new insights for organizational consideration and practice.

This parallel consideration of various literatures and points of views yields a set of propositions about the nature of genuine strategic planning, propositions with both descriptive and prescriptive implications. The propositions are as follows.

Proposition 1: The ideal outcome of planning is planning, not a plan. Dwight Eisenhower was more direct: "Plans are nothing. Planning is everything" (Keller, 1983, p. 99). Keller (1983) noted that strategic planning is not the production of a blueprint, or a fat, detailed document. Rather, is it a strategic direction and central strategy, which adjusts to changing conditions. America's success in World War II was made possible, in part, by the execution of countless small and large operations, many of which required detailed and sequential plans. But the overall plan for the deployment of finite resources, the strategic initiative, was surprisingly simple: defeat Hitler, and then turn attention to Japan.

Cohen & March (1974) alluded to the prime role of planning *vis a vis* plans in higher education. As they noted, many students of planning, to that point, had asserted that the interaction brought about by planning was more important than the plan itself. "Occasionally that interaction yields results of positive value," Cohen & March wrote. "But only rarely does it yield anything that would accurately describe the activities of a school or department beyond one or two years into the future" (p. 115), given the importance of environmental turbulence such as changes in personnel, political climates, foundation policy, and student demand.

This is not to suggest that plans should not produce goals and targets for an organization. Mintzberg (1994) was critical of post hoc rationalizations of failed planning efforts in the planning-itself-is-the-goal vein. Yet it is important to note that the failures of which he speaks are products of overly detailed efforts, constructed by management fiat and heavily dependent upon narrowly considered and shaky data. As to simplicity, Mintzberg wrote: "The more elaborate the planning procedures become--in response to the failure of the simpler ones--the greater seemed to be their failures" (p. 295). Mintzberg ultimately argued for planning that emphasizes process ahead of product.

Large, detailed plans, issued on a long time horizon of five, ten, or more years, are common in higher education. Further, they are sequentially structured, with each step dependent upon the completion, within a specified time frame, or precedent steps. This is, suggests one author, somewhat like playing a game of pool by specifying, before the commencement of play, each and every shot through the sinking of the eight ball (Priesmeyer, 1992).

Keller emphasized this aspect in his later writing. The product of a planning process should "not be too definite and detailed, yet vivid enough to allow persons to imagine a new and better set of conditions and services and to strive toward their fulfillment" (1997, p. 273). Academic planners James Morrison (editor of the Jossey-Bass planning journal *On the Horizon*), George Wilkinson, and Linda Forbes note in their forthcoming book *Common Sense Management* that many others have said that "it is the process, and not the plan that counts." They appear to endorse this general viewpoint with their instruction: "Keep this in mind: *The product you are seeking at each step is not a written report. It is a strategic mind-set of the senior leadership, indeed the whole organization*" (emphasis original).

Rebecca Stafford, president of Monmouth University and an established author and consultant in strategic planning, has noted where she believes many strategic planning processes go wrong (1997). Among her key cautions: most plans are far too detailed, or worse, burdened with fairly meaningless language disguised as details. She advises that the strategic initiatives in a plan should be few and specific.

Physicist and philosopher Danah Zohar (1997) notes that the institutional transformation process, integral to many planning processes, is on a much longer time frame than is practical to consider in a single plan. A consultant to communications giant Motorola, Zohar asked company officials how long they anticipated it would take to change institutional culture. "A generation," they said. At Toshiba, the transformation effort is expected to take 200 years! (p. 3).

Chaos theory suggests that because of the impossibility of long-term predictability, plans should be general, flexible, and relatively detail-free. Detailed operational plans subordinate to the strategic plan can be brought to and from the stage, and to the context of current and intended institutional circumstances, as warranted and necessary.

Proposition 2: Planning begins with a distillation of the institution's key values and purposes. These elements are not dictated from above, but discovered from within. In the paradoxical context of chaos theory, they provide a constant source of reference but are always open to challenge and modification. This process, within the context of chaos theory, is the discovery of a system's attractors, those principles which organize the system despite turbulence, establish its boundaries, and give it a general direction for the future. The attractors allow the actors within the system to make decisions consistent with the organization's collective identity, purposes, and goals, and to make decisions about the deployment of finite resources.

If colleges and universities are considered as chaotic systems, then the attempt to import principles, or their imposition by executive fiat, are alien to reality. Attractors already exist in the system, chaos theory states, and attention must be paid to them. Imposing new goals and purposes, without discovering and reconciling those already operational for the system actors, will result in an early separation of plans from reality.

Cohen & March (1974) reached conclusions about planning that would appear to endorse by implication the identification of institutional attractors. Calling for a modified view of planning, they wrote that planning is at least as effective as an interpretation of the past as a program for the future. Planning, in this context, is part of an institutional effort to "develop a new consistent theory of itself" (p. 228).

In fact, a great multitude of attractors likely exist in any organizational context. The more that exist, the more likely there are to be attractors in direct conflict. Actors within a system responding to different attractors than those recognized or endorsed by planners can effectively change the direction of the system, and within the concept of extreme sensitivity to influx, change the plan to conflicting ends. Failure to recognize the existence of attractors operant at various locations within an organization also ignores the centrality of fractal structure. A college may profess dedication to the quality of teaching as a central principle, but unless this principle is a goal and motivator at all levels of the organization, it is unlikely that this central dedication will be reflected in the experience of students.

This discovery of attractors would rarely be accomplished by reference to a college's mission statement. As many have noted and many more have experienced, these documents are often "kitchen sinks" of collected ideas and goals, good and bad, littered with platitudes, and with little sense of priorities. These elements may be attractors, but they have limited organizational power because of their multitude and lack of priority. Mintzberg (1994, p. 297) similarly decried the presence of "empty platitudes" at the heart of most planning processes. Newson and Hayes (1997), in an analysis of nearly 100 different college and university mission statements found those mission statements to be largely indistinguishable, of little focusing power, and exercises in institutional compromise. They include nearly all objectives suggested within the particular institution and reject very little in potential identity and mission. "Not surprisingly, few colleges find much use for their mission statements. They are usually not guidelines for serious planning" (p. 277). David Dill, commenting particularly on the Newson and Hayes study, asserted that there is intention in this situation: such mission statements are externally oriented, rather than internally, and are meant to keep an institution's options wide open. Dill has also observed the power of mission statements more simply and narrowly stated. When a mission statement is more focused, and "grounded in the culture and traditions" of the particular institution, then that mission statement is "central to the implementation of a successful planning and resource allocation process" (1997, p. 188).

Neumann and Larson considered the circumstance of a president, particularly a new one, who develops an institutional "vision" without consideration of operative imperatives within the college or university. Not only is this lack of recognition a neglect of opportunities and momentum already in operation, but institutional culture presents many opportunities to thwart an alien vision through resistance and sabotage (1997).

Chaffee and Jacobson were even more pointed. Their scan of planning history yields the lesson that "the planning process that is inconsistent with organizational culture is doomed to fail" (1997, p. 231). Chaffee and Jacobson noted that operative cultures are based on underlying and deep values and assumptions. When vision and the institution's resident values go head to head, the result is almost always the same: "Culture 1, Planning 0" (p. 230).

Morrison et al. (1999) stress the importance of seeking the broad involvement of institutional stakeholders and reaching agreement, as much as is possible, about mission and vision as preliminary to focus on the issues key to institutional success and the development of a strategy for their accomplishment. Nancy Shulock and Mernoy E. Harrison (1998) note that California State University-Sacramento considered but rejected the idea of using outside consultants to assist the planning effort there, because the administration judged that the organization would have resisted or suspected outsider involvement, and presumed conflicts in values.

Marvin Peterson, in his 1997 argument of the evolution of planning to a more desirable state of "contextual" planning, considered "themes and visions" to be the basic, motivating mechanism for successful planning. He posits the idea of contextual planning as an advance upon conventional strategic planning, where motivation comes from guidance, review, and improvement, and an advance particularly upon the older idea of long-range planning, where motivation derives from direction and control. While not fully replacing the idea of strategic planning, Peterson intends that his contextual model be more "holistic" (p. 137).

Physical systems are typically characterized by only a few, strong attractors. As one example, a researcher at a nuclear physics lab in Los Alamos, New Mexico, started with randomly scattered, similar objects on a computer screen, and gave them but three rules: keep a minimum distance from other objects, move at the same speed, and head toward the densest concentration in the vicinity. The pattern created was the flocking of birds

(Waldrop, 1992). Flocking would be a difficult, unmanageable task if attempted somehow by external monitoring and control. Yet the system operates, simply and without fail, through the establishment of only a very few self-organizing principles.

Proposition 3: The widest possible universe of information should be made available to all members of the institution. This universe of information includes ongoing, rich, and current feedback. Keller's (1983) advancement of the concept of environmental scanning and information gathering as critical to good planning has become widely accepted. Where chaos theory perhaps advances the concept of information gathering and sharing is its emphasis on the importance of feedback. The discussion and creation of plans themselves are elements of the informational landscape. They create feedback loops, whether planners recognize them or not. Schuster et al. (1994) exaggerate the importance that Keller (1983) places on the need for secrecy and confidentiality in the deliberations of the Joint Big Decision Committee, Keller's generic name for a campus's central planning body. But chaos theory does support Schuster's argument for open planning, and Keller subsequently to his 1983 book would revise his view on the Joint Big Decision Committee; more open communication engenders trust, he concluded (1988). Chaos theory suggests that planning executed in secret or with an air of exclusion will deny itself the creativity, vitality, and connection with reality that open--that is to say, feedback-rich--planning processes enjoy.

The stereotypical view of military organization is strictly hierarchical, with plans originating from above and executed without modification or questioning down the rank lines. But in fact the environment of the U.S. Army today is extremely turbulent: downsizing is massive, missions unforeseen a short time ago are regularly undertaken, wars are fought in the desert and other alien territory, and so on. An adaptive measure used extensively by the Army--where failure can be death--is operational feedback. After Action Reviews (AARs) occur following virtually every training event or actual mission. Soldiers and officers gather to debrief and to discuss what just happened and how it could be improved. Management consultant Margaret Wheatley, observing these sessions, wrote that the process "has become so ingrained that during the Gulf War AARs would be held spontaneously in the rear of a truck--called by anyone independent of rank" (1994a, p. 52). How many of our planning and operational systems have any feedback mechanisms at all, let alone those as immediate and adaptive as ones used by the "rigid" U.S. Army?

Chaos theory suggests that virtually unimpeded access to information, including feedback, is critical to ongoing monitoring of the environment. But an unorganized avalanche of information can be as detrimental to the processing of that information as a deficit of its supply. The Internet and its information resources have been described as the world's largest library--where all the books have been dumped in a heap on the floor. Yet in the same way that Internet browsers and other organizational tools have helped us tame the disorder, so can internal, campus-based computer systems and e-mail networks organize and deliver information and opinion to desktops with minimums of deletion and delay. Avoidance of the avalanche of information may be a rationalization for the restriction of its flow. Chaos theory would suggest that the appropriate solution is organization, not restriction. Assessments of the value and relationships of information may be part of this organizational schema, but should not restrict access to the information itself; others may reach different conclusions about information value and relationships.

Chaffee and Jacobson (1997) concurred with this view. Information should not only be widely shared, but shared in a variety of ways, including reports, speeches, newsletters, and other ways. This sharing should include sensitive information. Likewise, they write, the planning process should be open to information offered from any source; the openness of the administration with information sets the tone for receptiveness and allows the process to capture information that otherwise would escape. This is consistent with Peterson's contextual planning model (1997), which emphasizes widespread participation in the information-gathering and planning processes.

The creation and facilitative ordering of this informational base may be a key, as well, to securing involvement in the planning process. Shulock and Harrison (1998) found that the more information that was provided in their planning process, the more information that was requested. Although they made full, uninterpreted information available to all who asked, they hold that a key role of those guiding planning efforts is the responsibility to direct all planning participants focus to emergent key issues.

Proposition 4: Dissent and conflict are creative, healthy, and real. The absence of conflict is reductionist, illusory, and suspect. Chaos recognizes and respects the power of turbulence. It is the essence of creativity in chaotic systems. Ideas uncontested are suspect in their power and frequently unable to withstand the inevitable influx of turbulence. Yet how much of our planning is characterized by a desire to minimize conflict, to subtly suppress dissent, and to reach early consensus? Keller (1983) noted this desire for tranquility as a root of the smothering of organizational creativity when he quoted the president of Indiana University: "Many presidents spend much of their time trying to anger the fewest people rather than trying to produce something really good..." (p. 173). Keller further noted that many presidents see planners as creators of problems, not solvers of them. In the first article he authored for the journal *Planning for Higher Education* after leaving its editorship, Keller stresses the need to get beyond superficialities. "[O]nly if we recognize that there are subterranean forces at work in people's psyches during a planning process can we find out what will work better in preparing those on campus for change and in encouraging them to make bold decisions for their college" (1997-98, p. 19).

Mary Parker Follett, an organizational theorist and consultant writing more than seven decades ago, distinguished our various ways of dealing with conflict as domination, compromise, and integration (1925, in Fox and Urick, 1973). Chaos theory would suggest that domination, the simple victory of one side over another, merely delays the turbulent effect of the losing side's resistance to or outright sabotage of compliance with the "winning" position. Compromise, more ostensibly cordial, likewise delays or ignores turbulence, in that agreement is typically reached at a fairly low and superficial level, and leaves the turbulence as an unrecognized, background element. Integration, solutions in which the desires of all sides have been met and skillfully combined, is the creative resolution of conflict, and the resolution most consistent with chaos theory. Neither did Follett suggest nor would any other observer hold that all conflict is resolvable by integration. But without recognition, even encouragement, of conflict, without all sides putting their cards on the table, integration is impossible.

Consonant with Follett, Zohar (1997) holds that "debate"—the contesting of preset positions to victory or defeat—has become the dominant Western form of solving disagreements and arriving at decisions. But before debate, in ancient Greece, was *dialogue*. *Dia* means "through," and *logos* is translated as "words." But an older translation of *logos* would be "relationship." Ancient Greeks, before the assignment of debates to representatives in republican government, would meet in the agora, or marketplace, and hold dialogue on issues. "This allowed for the emergence of collective insight, collective wisdom, and a nonconfrontational way of solving problems....Dialogue is about finding out, about discussing something openly until I break through to some new knowledge or insight....Dialogue involves my emotions and my deeper sensitivities, as well as my best intellectual thinking facilities" (pp. 137-138).

Neumann and Larson (1997) found relevance in these general perspectives for contemporary strategic planning. Academic culture itself is built largely upon "communities of divergent discourse" (p. 194). What is to be avoided is the emergence in planning of an administrative, "single-minded view that stifles the disciplined growth of certain lines of thought in favor of others" (p. 194). Openness to various points of view can, Neumann and Larson cited as an example, can lead to the blending and mutual consideration of viewpoints that might be pigeonholed early on as self-interested or irrelevant. Tierney (1992) echoes this perspective. Rather than suppress difference, he writes, we should honor it, and "build across our differences a commonality that encompasses them" (p. 18). Holton (1995) suggested that conflict is not the problem, but the solution; conflict "can be cathartic, providing opportunities for revitalization, energizing, and creativity by all involved in the academy" (p. 94). Harvey (1998) notes that the resource of the faculty is the institution's "most valuable intellectual resource," and that it is critical to involve them in institutional problem solving. Further, "that participation is the best—and perhaps the only—way of promoting a sense of ownership" (pp. 6-7).

Proposition 5: Linearity doesn't work in strategic planning. It doesn't work in dictation--planning and plans imposed from above--or in collation--planning and plans created solely by the collection of unit information. By this point in the argument, the reader may see the obvious incompatibility of top-down, executive-committee-dictated planning with chaos theory. Attractors are not identified, feedback is denied, faint recognition of the environment is inevitable, and the implementation of plans is made virtually impossible by the lack of fractal structure. But it may be less obvious that the planning structure opposite to dictation--collation--is equally unsuitable.

Collation is the collection of individual "plans" by the department, the collection of these departmental collations by the college or school, and so on up the structure, until they are united at the top level of the organization. As Keller wrote (1983), strategic planning "is not a collection of departmental plans, compiled and edited....A university is more than the aggregate of its parts" (p. 141). It is possible to mistake this sort of collation for a sort of empowerment, or a democratic process, but collation can at best only identify individual desires and directions.

Chaos theory would inform us that this process lacks the connectivity between elements of an organization that is inherent in systems. Collation without feedback creates only linear and upwardly directed information paths. Collation without feedback and the identification of organization attractors does not contribute to self-organization and sustained direction.

The type of bottom-up strategic planning element suggested by chaos theory is more akin to the "grassroots" model of strategy formation championed by Mintzberg (1994): "Strategies grow like weeds in a garden, they are not cultivated like tomatoes in a hothouse" (p. 287). Such strategies spring up unbidden throughout the organization, but they do not become organizational until they "become collective, that is when the patterns proliferate to pervade the behavior of the organization at large" (p. 288). Management's role, according to Mintzberg, is to recognize these emergent patterns and to nurture their growth throughout the organization. Chaos theory would suggest that such a role is an acknowledgment of the centrality and power of fractal structure.

Neumann and Larson (1997), in their consideration of processes which flaw planning processes, noted that even when planners use feedback mechanisms, they may fail to seek out negative feedback (such as disagreement or initiative failure). Such planners give attention instead to feedback that supports leaders' preconceptions. It is a "good news" approach to planning that robs the process of vitality and relevance. It is a partial, truncated, and flawed approach.

Proposition 6: The institution should budget--fiscally and psychically--for failure. Pilots are alternate futures. Not all can be realized or succeed. Several of these propositions are stated with attention-getting provocation, and none so more than this one. Experimentation and striking out in new directions are often viewed heroically on the front end, but disparaged on the back side after less than favorable results. We should recognize that in planning, as in financial investment, higher returns are made possible by higher risk. The challenge is to improve—not assure—the chances of success.

Universities are historically averse to change, even those changes which are ultimately and broadly adopted in higher education (Siegfried et al., 1995). This might be characterized as an overly developed aversion to Type I statistical error, that is, an aversion to making a change even when strong evidence exists that change is beneficial.

Yet strategic planning by its nature attempts to make some tentative decisions about and preparations for an uncertain future. As Keller wrote (1983), "...strategic planning increases risk taking. It fosters an entrepreneurial spirit, a readiness to start new ventures" (p. 142). Dolence and Norris caution that if we wait until "the vision is perfectly clear and risks have vanished, the opportunities will have passed, as well" (1995, p. 4); the costs of lost opportunity are collected more quickly in a more rapidly changing environment. Morrison et. al (1999) encourage that "you and your [planning] colleagues must be imaginative, innovative, and willing to take risks," and "that means you are flexible, and not wedded to a set of strategies or action plans that you cannot change."

Chaos theory suggests that the reliably predictive future is exhausted well before the time frame necessary for the start-up, testing, and implementation of complex projects. Chaos theory suggests that strategic planning can at best identify likely or possible futures, but cannot, through the compilation of adequate data, foretell the future through longitudinal projections. Therefore tests and pilots should be launched, with the knowledge that not all possible or likely futures will come to pass. Even though strong data collection and ongoing feedback can result in what might be called "wise piloting," some pilots will fail.

Frank Schmidtlein (1989-1990) has confirmed what many of us have suspected from our more limited experience: there are precious few connections in most institutions between the strategic planning process and the budgeting process. In two nationwide studies of budgeting in which Schmidtlein was a principal investigator, not one person involved in budget negotiations consulted or cited a campus mission statement for guidance. As earlier noted, the mission statement is, on its own, a limited element in strategic planning, but it is a logical starting point. Schmidtlein also argued for some relaxation of two of conventional budgeting's strongest characteristics: rigid budgeting time frames and a virtually complete allocation of budget resources to designated purposes. This process tends to ignore the observation of one study participant: "What comes up is as important as what's planned. That's life" (p. 14). Hearn (1996) wrote that change efforts "not in accord with the critical sources of funding, prestige, or personnel for a department or campus are unlikely to succeed" (p. 149). Robert Haas, former vice president for administration at the University of Virginia and at West Virginia University, affirmed from his experience the apparent disconnect between plans and fiscal actions, but notes that the plan itself is often at fault: "It is surprising...how infrequently a plan identifies in detail the specific regular or episodic resource-allocation decisions that will be informed by the contents of the plan" (1997, p. 258).

Keller (1983) recognized this in an element of his prescription that is perhaps less closely observed than other elements: "To foster change, have a venture capital fund ready to support those on campus who are the most creative and entrepreneurial" (p. 169). Later work by Keller (1997b) supports this idea even more emphatically: "Unless money follows new ideas, the strategic priorities will not get adequate support and the planning exercise will be perceived as a sham" (p. 168).

It is more difficult to document, but it follows that institutions are as psychically averse to piloting as they are fiscally averse to it. If we subtly punish or isolate those whose pilots seemed reasonable and which were blessed, but fail, and we quickly distance ourselves from failure rather than examine it for lessons, we discourage the experimentation necessary to discover the future.

Weick, who confessed a "mild affection" (1976, p. 6-7) for loose coupling, saw as one of its benefits the ability to test "mutations and novel solutions" it develops in response to its "many independent sensing mechanisms." Weick cautioned that this same structure that permits these mutations to flourish may prevent their diffusion. This would support Mintzberg's (1994) suggestion that a role of management is to identify and promote promising strategies throughout an organization.

Proposition 7: The considerable expense of time on the front end is an investment. It is recouped, with interest, in the future. There can be little doubt that top-down, stripped-down, feedback-free planning is faster. This is a false economy. Fast plans may be convenient, even poetic, but without a rich understanding of the environment, the discovery of attractors, and the creation of iterative structure, they will, more often than not, fail. Time and resources will be inefficiently spent as institutional leaders attempt to impose a plan alien to the system's actual dynamics. Alternately, a plan developed from these dynamics, and not against them, will be more fully implemented, more reflected at fractal dimensions of the organization, more in concert with the organization's attractors, and more successful.

Keller (1983) noted that genuine strategic planning is broadly participatory. But Newton (1992) suggested that conflict carrying out this involvement may arise from the clash between the corporate culture of administration, on the hand, and the academic culture on the other. The managerial bent of the former values quick decisions in response to rapidly changing environmental conditions, top-down decision making, and an expectation of organizational compliance. The latter culture values extended conversations, deliberation, and the testing of ideas over time and circumstances. Efforts to impose a corporate culture in domination of the academic culture, within the planning arena, often brings the planning process to a bad end.

Neumann and Larson (1997), who emphasize the importance of detecting organizational patterns and values that may be subtle but are nonetheless deep, note the many models of leadership and strategic planning emphasize broad involvement, but they note as well that in practice these principles are often ignored. Invitations to participate, or the creation of open forums, are not enough of an effort to gather broad input and diverse participation. Conversation, wrote Neumann and Larson, "must also permeate space and time." This expanded conversation involves not only formal meetings, but hallway talk, and entails an active effort on the part of planning coordinators to bring the thinking of groups and individuals to the attention of other groups and individuals. This is a process heavily dependent upon feedback, and feedback, in turn, is heavily dependent upon the investment of time.

Chaffee and Jacobson (1997) tie planning to institutional culture, and changing or redirecting culture, they note, can take substantial time. But they maintain that the "payoff can be immeasurably large." The payoff includes enhanced environmental sensing aided by many eyes and ears, the greater creativity made possible by many minds, and broad buy-in to the results of institutional planning, "in ways that the central administration could never have imagined or planned for" (p. 244). Conversely and "often, in the final analysis, [a] plan cannot be implemented, because key players have not agreed to it" (Innes, 1996, p. 470).

Proposition 8: The executive is not demoted or minimized. The executive is the most critical shaper and champion of the process. Ultimately, the executive is empowered by the process. All of this may suggest, without intention, that the executive becomes figurehead in a planning process informed by chaos theory. Descriptions of chaos-related metaphors and management viewpoints have perhaps reinforced this perception. Gareth Morgan writes, "In complex systems, no one is ever in a position to control or design system operations in a comprehensive way....At best, would-be managers have to be content with an ability to nudge and push a system in a desired direction by shaping critical parameters that can influence the course of system evolution" (1997, p. 272-273).

James Fisher, himself a former president and a long-time commentator on the institution of the presidency, gave voice to the suspicion that constituent-involving processes are in fact an abdication of presidential power and responsibility (1994). "In a misguided sense of democracy" (p. 60), board members, faculty, students, and others are engaged in an "unending and totally unproductive morass of committee meetings, faculty meetings, formal and informal dialogues" (p. 62), leading to paralysis and undistinguished, lowest-common-denominator compromise. (Interestingly, Fisher describes one president who embodies his ideal of strong, independent leadership as an individual widely and warmly regarded for his ability of having "plenty of time to see everyone," and one who "encourages candor, even disagreement" [p. 63]).

John T. Dever, vice president for academic affairs at Blue Ridge Community College in Virginia, has written critically of Senge's and others' ignoring or downplaying the role of formal leadership in organizational processes. Dever writes (1997) of the the academic arena:

> A president can produce results for weal or woe because he or she occupies an office from which force can be leveraged throughout the organization....The leader must design, teach, husband, and deploy resources; but at times, he or she must energize the organization(p. 60).

Further:

> Presidents and senior administrative staff leading these educational enterprises will need to be comfortable with fluid organizational dynamics....However, they also will need to be prepared to intensify their leadership efforts when they must advocate forcefully, maneuver deftly, and, as required, do battle on both internal and external fronts (p. 62)

I suggest that the president active in the promotion and advancement of strategic planning may be seen, in the language of chaos theory, as an attractor, a basic element in the formation of a system's patterns. He or she can speed or slow the process, give or deny it legitimacy, and provide energy to the process when necessary.

Ultimately, the president can be empowered by the process. He or she should have a more clearly defined mandate, and should be able to make decisions, hire and fire personnel, allocate resources, commence and terminate programs. The president should draw power, a greater level of consensus, and support for great operational leaps if he or she can tie decisions to the institution's goals and visions emerging from the chaos-informed planning process.

De Geus, considering the defining qualities of long-lasting, successful corporations, writes that managers of such entities shared a common ability to loosen control. Individuals in the organization "must have some freedom from control, from direction, and from punishment for failures" if they are to put forward their best efforts (1997, p. 55).

Keller (1997b) noted specific, critical points for presidential intervention in and direction of the planning process, regardless of the openness of that process. The president needs to make a compelling case for the need for a strategic plan. The president needs to lay out a plan for the plan: a timetable and outline or nature of what is expected in the final product. The president or other respected campus leader needs to be prepared to step in and re-energize or direct planning processes that are stalled or sidetracked. The president should be prepared to produce timely implementations from the planning process, even while it is in progress, in order to contribute to the sense of urgency and empowerment. Finally, the president, once basic strategic directions are agreed upon institutionally, should be prepared to compel compliance and cooperation, to turn from the carrot to the stick.

Peter Fairweather (1997) advocates that the president and other leaders can sustain and energized institutional transformation through "small wins" in numerous areas. This makes change conceivable, palatable, and realistic when massive change is too huge and abstract to comprehend. Further small, successful change enables people to support larger-scale change going in a similar direction.

However, the "strong" president, one who acts in virtual sole proprietorship of power, one who enforces his or her will with scant regard for opposition, feedback or organizational attractors, has the potential to become an attractor of a different sort--a point attractor. Like a pendulum swirling toward a point of rest, the patterns of the institution become tighter and tighter, tending toward inertia. Feedback is of a different sort: lowered morale and commitment, leading to more rules and regulation, in a cycle that quickly overcomes all other dynamic inputs to the system. The actors on the scene become resigned to treading water instead of making waves (Platje & Seidel, 1993). Bensimon and Neumann (1993) describe the circumstance of the president prone to action without consultation as contributory to an executive staff which is given to only going through the motions of deliberation among themselves and with the president. Tierney encouraged us to view leadership, in planning and in broader contexts, more in terms of "facilitation" than "direction....Leaders create the conditions for dialogue rather than acting as if they are the ones who define the reality of the organization" (p. 19).

It would seem rather critical that any model of any significant aspect of organizational function would devote substantial attention to the role of the executive. As Harvey writes, "effective leadership...is indispensable in guiding a campus through the treacherous waters of strategic planning....[L]eadership is the capstone" (p. 7).

Proposition 9: That which can be quantified is not to be overvalued,

and that which cannot be quantified is not to be discounted. Much of the circumstance of unpredictability comes from our inability to discern which factors in our environment, which "butterfly wings," will be absorbed by the most powerful dynamics of the system, and which will gain great power, from iterative dynamics, far out of proportion with the seeming insignificance of their genesis. The American G.I. Bill was such a butterfly wing. The bill's most ardent supporters in the closing days of World War II believed its promise of unemployment benefits for veterans to be the bill's most significant feature. Few thought that many returning veterans would take advantage of the bill's educational benefits. Yet more than 2 million veterans jumped at the chance to attend college. More significantly, access to higher education in America was transformed, in the public's mind, from a privilege for the few to an entitlement for virtually all people (Kiester, 1994).

None of the contributing factors to the effects of the G.I. Bill were identified, except in retrospect, by quantification. On the other hand, over-dependence upon quantification has yielded incorrect conclusions. The dominant "fact" of the planning future going into the '80s was a declining pool of potential students, which would result in the closing of at least 10%, and perhaps as many 25%, of America's colleges and universities in the decade then ahead (Keller, 1983). The realized future was an increase in college enrollments through the '80s, and the survival of the great majority of the institutions placed on death watch. Linear planners perhaps took too few factors into account, including the power of institutional creativity and adaptability. Such planners are heavily dependent for their projections upon that which can be more easily quantified (Wheatley, 1992; Frances, 1989).

Over-reliance upon quantifiable data, and the concurrent under-consideration of such elements as opinion, desires, and ambitions was put into perspective by Albert Einstein: "Not everything that counts, can be counted; and not everything that can be counted, counts" (Marino, 1995, p. 218).

Proposition 10: The future is a creation, not a prediction. This power of agency is the distinguishing context of human chaotic systems. Despite the difficulty of prediction, the certainty of uncertainty, it would be a grave error to take from chaos theory the idea that planning is futile, because the future is unpredictable. Rather, the primary lesson is that the future can be created. Conventional, linear planning is based largely on the assumption of high predictability. Linear planning puts an emphasis on trend lines, projecting them into the future, and tends to make insufficient accounting for the influx of turbulence, foreseen or not. Linear planning postulates a future far over the horizon, but it is rarely realized in any recognizable form. Directors of linear planning attempt to execute the future less than they attempt to create it, and they are often wrong. Priesmeyer, a proponent of nonlinear management, described "forecasting," a linear approach, as (p. 176) "the process of using historical data exclusively to make estimates of the future." Such linear extrapolation, he added, fails to recognize the presence of free will, and are therefore "naive for any system in which humans participate." Mintzberg touches upon this in his description of the "grand fallacy" of strategic planning: "Because analysis is not synthesis, strategic planning is not strategic formulation" (1994, p. 321). Analysis is decompositional, according to Mintzberg, and is therefore incapable of the creation of novel strategies.

Peterson encourages us to regard the future and the environment as "complex but malleable" (1997, p. 134). But the ability to make long-term changes in the future is dependent upon our willingness, as actors within the university or social system, to make "long-term commitments" and to apply "consistent effort" toward desired ends (p. 153). Peterson specifically distinguishes this from a strategic planning perspective which places a higher premium over environmental evaluations and scanning, as opposed to desired outcomes.

Participants in nonlinear planning, by contrast to linear planners, come to realize that the future is an invention; the external and internal environments are strong creative elements of the future, but so are dreams, values, and ambitions. Metaphorically, the flutter of a wing can move not only the breeze but the system, particularly if applied with consistency and in partnership. These "small" elements gain power over time, and can overcome substantial resistance.

CHAPTER III

RESEARCH METHODS

This research project seeks to determine how the experiences of institutions and individuals involved in genuine strategic planning in a variety of higher education settings might enhance the description or utility of a planning model informed by chaos theory, and therefore contribute to its field utility in other institutional contexts. A case study methodology is employed.

A useful model for this research is suggested by Cynthia Hardy's six-institution case study of Canadian higher education and its varied responses to financial retrenchment necessities (*The Politics of Collegiality*, 1996). Hardy's study was based primarily on interviews with key actors and participants at these institutions. She used, as well, both university and third-party documentation for analysis. Hardy's multiple-case design was used to explore a single unit of analysis, the university, on the rationale that theoretical replication would shed light on the variety of tactics and responses that financial exigency brought about. Cases were selected to reflect a variety of institutional and environmental circumstances, including geographic distribution, enrollment size, and institutional age.

Hardy cites Yin (1994) to note that case studies of this sort are not intended to reflect statistical, but rather theoretical, generalization. Studies such as Hardy's—and this dissertation research—are not intended to assess the frequency of phenomena, but to attempt a generalization of theory in a variety of settings. Yin cautions (1994, p. 31) that the conception of statistical generalization as the method of generalizing results from case study is a "fatal flaw"; case study selection is not intended to be statistically representative of a larger "population" of cases or circumstances, or statistically projectable from the specific to the universal. In this study, the case-study approach is intended to give descriptive enrichment to the propositions and to examine the robustness of the propositions in actual planning contexts.

Four cases are included in this study. These institutions are Blue Ridge Community College in Weyers Cave, Virginia; Carson-Newman College in Jefferson City, Tennessee; the University of Calgary, Calgary, Alberta, Canada; and Red Deer College, Red Deer, Alberta, Canada. The institutions are selected for inclusion in the study, first, for their compliance, as observed by the researcher (particularly through the documentary record of planning processes) and affirmed by key institutional leaders such as presidents or chief planning officers, as having planning processes that are compliant with Keller's (1983) definition of genuine strategic planning; second, for elements of interinstitutional diversity, including geographic location, degree-granting status, mission, enrollment base, public or private status, national and state/provincial environments, and time of involvement in the current planning program; and third, general institutional interest in and agreement to cooperate with the research project. With particular regard to this last point, and in compliance with institutional research guidelines, explicit, authoritative, written permission was secured from each of the four institutions for their inclusion in this research.

Blue Ridge Community College is a public, two-year college, offering vocation and transfer programs through the associate degree, and located in rural Weyers Cave, Virginia. It is a small institution, with an enrollment of

2500 full- and part-time students. The current planning effort is about eight years old, and corresponds in large with the current president's tenure. The planning process is highly committed to the involvement of a large portion of the institution's internal and external constituencies. Blue Ridge Community College is of particular interest in this research, as they are an institution which has conducted its planning with explicit knowledge of and reference to chaos theory among key planners.

Carson-Newman College is a small, private college in a small town, Jefferson City, Tennessee. The college is affiliated with the Tennessee Baptist Convention. The college is about a decade into its current era of institutional planning, this mark suggested by the strategic report and plan produced by contract in 1987 with Barton-Gillet Company of Baltimore, and under the project direction of George Keller. A second, major strategic plan was completed in 1994, and related efforts continue, as in the consultive decision process in which the institution in 1996 decided to retain the "college" designation rather than to rename itself a "university." A goal has remained constant: to be recognized as the finest Baptist college in the country by the year 2001. The same individual has held the presidency throughout these planning efforts. Keller's involvement with the process was an assurance of recognition his criteria of genuine strategic planning. Initial conversations indicated widespread satisfaction with the planning process and its result. The case study appeared to be an opportunity to examine the propositions against a successful and largely concluded case.

The University of Calgary is a public, doctoral and research university which marked its 30-year anniversary in 1996. Enrollment is about 20,000. Recent years have been challenging: the provincial grant declined 20% in three years in the late 90s, salaries have been cut, academic and nonacademic staffing has been reduced, and tuition rates are climbing to near U.S.-state levels. Enrollment trends, once robust, have flattened. The former president initiated a major strategic planning initiative in early 1996, in the last half-year of his term. The new president inherited the process. The institution claimed to have launched the most ambitious and large-scale strategic planning process in Canada, and information they had gathered on other universities across the country appeared to offer some confirmation of this claim. Further, George Keller (1997b) named the University of Calgary among a handful of institutions he considered to be currently or recently engaged in real strategic planning, and his citation of the University of Calgary was the only Canadian institution in his short list.

Red Deer College, a 5000-student, two-year institution 100 miles north of Calgary, labors under fiscal and enrollment challenges similar to the University of Calgary. The college has been denied in their effort to receive four-year-degree status, and the political prospects for success on this goal are not promising. The president, two years in office, in the fall of 1996 revisited with the Board of Governors the institution's fundamental purposes and directions. The results include a commitment to a new planning process that began to unfold in 1997. The college was selected for case analysis on the basis of conversations with the president and initial documents produced by the college's board, documents which affirmed their desire for a transformational strategic planning process. The case presented particular opportunities to observe the effects of presidential initiative and leadership in the initiation of a planning process. This was anticipated to be a positive development. Most regrettably for the individual, but providing new insights to the study, the president became very ill during the early stages of the planning process and subsequently died. His handicapped leadership during his illness, and his eventual death, had substantial impact on the planning process, and provided insight from a different perspective on the role and importance of presidential leadership in planning.

Further considerations leading to the selection of these institutions included proximity to the researcher. The American institutions are located in the Southeastern U.S., allowing for more frequent research visits. The researcher gained familiarity with the Canadian institutions during a 1996-97 Fulbright Scholarship residency in Alberta. The inclusion of Canadian institutions as well as American ones allows for the examination of the propositions in a different cultural context, and thus may provide additional insight.

The four institutions cannot fully and exhaustively represent the range of institutional size, mission, quality, funding sources, level of educational offerings, and other factors which distinguish North America's thousands of colleges and universities one from the other. Nor is such representation of full range, a sampling, a goal of qualitative research, as noted earlier in the discussion of Yin (1994). Rather, the intention is to examine the propositions of the metaphor against a variety of contexts, and thus, if they are affirmed, to advance the idea that they may be applicable in a variety of institutional and cultural contexts.

It is of interest to note that among the four institutions are represented two two-year colleges, a private liberal arts college, and a comprehensive university; two American and two Canadian institutions; planning processes that range, temporally, from just initiated to fully matured; planning processes which make reference to chaos theory and those that do not; presidential presence during the planning which ranges from continuous to transitional to abruptly absent; and as was revealed during the research, planning which was largely successful to planning that was inconclusive in success or clearly floundering. Variety of circumstance was a case-selection goal, and it was achieved in large in a variety of aspects.

Interview subjects included, but were not restricted to, the presidents and chief planning officers and designates. Other individuals interviewed included faculty members, deans, nonacademic staff, and governing board members. A few former officials and staff members, outside consultants, and others external to the formal institutional settings were added to the roster of interviewees as it appeared advisable in the course of research. Some key individuals were interviewed more than once over the course of the research. In all, 54 individuals were formally interviewed, and these recorded or notated sessions were supplemented by numerous less-formal interviews, follow-up conversations, e-mail clarifications and expansions, etc.

Following one of the open-ended interviewing formats detailed by Patton (1990), the interviews were largely informal-conversational in nature. Some preliminary, role-specific questions were prepared in each interview case (see Appendix B), but much of subsequent questioning was expansive upon opening questions.

A framework of inquiry implicit to the research are the ten propositions explicated in Chapter Two. Interview subjects were afforded various levels of familiarity with this frame dependent upon their personal interest in the subject matter, time, and academic background. Although there is reason to be cautious about the possibility that knowledge of the model frame may "put things in someone's mind" (Patton, 1990, p. 278) it is important to keep in mind that these are, generally, elite interviewees, following the definition of such put forth by Marshall & Rossman (1995). These are individuals who are likely to expect "active interplay" (p. 83) with the interviewer, and who are likely to respond well to "intelligent, provocative, open-ended questions that allow them the freedom to use their knowledge and imagination" (p. 83). At home in the "realm of ideas, policies, and generalizations," they typically reward "accurate conceptualization of the problem" with contributions of "insight and meaning" (p. 84). This familiarity with my frame of inquiry ranged from a very few sentences of introduction at the commencement of an interview, to interviewees having reviewed more detailed explanations of the research frame, such as "Can Chaos Theory Improve Planning?" (Cutright, 1996-97). It was my intention that an interview subject be offered familiarity with the researcher's framework and propositions, through conversation or the sharing of written materials several days before interviews, up to the individual's level or interest and time commitment. The expectation was that this passing familiarity or more complete theoretical/metaphorical grounding allowed these individuals, professionals comfortable with the give-and-take of theory and idea development basic to the academic environment, to more actively critique and shape the model itself. This is a circumstance and opportunity which, with an elite interviewee, outweighs the dangers of coerced confirmation. Incumbent upon me, of course, is the duty to account for or report substantial dissent from the model.

Interviews were audiotaped except in that circumstance in which the interview subject might decline such permission; taping permission was declined in only two interviews, at different institutions. In those cases, notes were taken during the interviews, and summaries of the interviews were prepared immediately after them. Interview transcriptions, notes and recollections will be a primary data base from which findings will be reported.

A loose form of content analysis through coding was employed for transcript and document analysis (Miles & Huberman, 1994). Select passages were coded 1-10, corresponding to the ten propositions, and further noted with plus or minus signs were sometimes added to indicate support for or conflict with the propositions. For example, a hypothetical interviewee's comment that "we let everyone at the college see all the planning data and documents" would be coded "+3" (in reference to research proposition three, "The widest possible universe of information should be made available to all members of the organization.") But her comment that "we wanted to get this process over in two weeks and move on" would be coded -7 (in reference to proposition seven, "The considerable expense of time on the front end of planning is an investment. It is recouped, with interest, in the future.") The anticipated pattern was that planning projects and elements that have some basis to be judged successful, either by institutionally established criteria of the judgments of the participants, will have strong relationship to "+" codings, and conversely that problems in planning will correspond to "-" codings. This coding system alerted me to elements of the propositions which had not been adequately explored in preliminary rounds of interviews and which required further exploration through reinterviews or new interviews. The coding system also would allow an examination of the data base by a third party (with adequate shielding of interviewee identities) for appropriateness of coding and categorical assignments, and thus of conclusions.

This coding system was also applied to documentary and other sources, such as planning reports, planning charges from the president, etc. Examples of these documentary sources would include, but not be limited to: officially published planning documents and reports; memos among faculty and staff members at the case-study institutions; campus and public newspaper reports on the planning processes and their institutional contexts; proceedings and documents of governing boards; and various campus documents prepared in response to external agency guidelines and expectations. These artifacts have been cited when appropriate, but they more often formed the background of knowledge necessary for informed interviews with planning and institutional participants.

It should be stressed that this coding system was intended as an aid to the organization and perhaps verification of the data and findings, and was in no fashion an attempt to derive quantifiable data. That is to say, a preponderance of "7" codings, for example, would not of necessity give weight to or indications against proposition seven. Rather, the coding helped organize the substantial quantity of data for summary narrative, and alerted me to elements of the propositions which had not been adequately explored to various time points during the course of the study, so that revisitation was possible while still in the temporal and physical proximity of the case studies.

Miles & Huberman (1994) offer guidance on procedures to address issues of confirmability, reliability, and validity (pp. 277-280). It is incumbent upon a researcher, for example, to be explicit as to the collection, processing, and interpretation of data. The study sought parallelism across data sources, such as interviews, planning documents, and comparable situations among institutions. It was necessary that the descriptive elements of the data reporting be "thick" enough to portray context and create vicarious experience for the reader. Negative evidence, primarily divergent interview sources, was sought out and considered.

Chapter four of this study is an institution-by-institution narrative about the strategic planning process at each college or university, setting that process in an institutional and temporal context, and selecting from interview and other data to give a sense of the planning processes status, the range of opinions of those working in it and affected by it, and indicators or success or problems. These are the "stories" of the planning imperatives and experiences at the institutions. Fairly light and passing reference will be made to the research framework, the propositions of the proposed chaos-theory metaphor. The chapter continues to an effort to tie the planning experiences to the propositions, with the goal of lending descriptive depth to or the modification of the propositions.

Chapter five is a summary of this investigative experience, a consideration of its implications, and some recommendations for further inquiry.

CHAPTER IV

FINDINGS OF THE STUDY

Case: Blue Ridge Community College

In many respects, Blue Ridge Community College, in Weyers Cave, Virginia, is typical of the small, regional community college replicated throughout the United States. The organization of the college, on paper, appears fairly typical as well. But internally and in reality, according to the president and his co-authors in a 1995 paper, "chaos reigns" (Levin, B.H, Lanigan, J.B., and Perkins, J.R., 1995, p. 11). Central values are identified and articulated, but continuous change and challenge is embraced, conflict is encouraged, hierarchy has more limited power than even in other collegiate circumstances, information abounds and is freely shared, cross-functional collaboration is mandatory, and the president is "a whipless ringmaster in a three-ring circus. His only tools are his intellect, sensitivity, and vision" (Levin et al., 1995, p. 14).

Blue Ridge Community College is a state-assisted college with a mission of service to the northwestern Virginia counties of Augusta, Highland, and Rockingham. The college offers both vocational and transfer programs ranging through the associate degree. It is a small institution of about 2400 students, and a full-time-equivalency of about 1200. The general pattern of recent years has been that of enrollment growth, but with some minor downturns in the mid-'90s.

When James Perkins assumed the presidency in 1989, coming to Blue Ridge Community College from another Virginia two-year college, where he had served as dean of instruction, he encountered, he noted, "a lot of anxiety about where the college was going." Perkins was presented with a position paper, drafted by the faculty and recommending directions for the coming decade. That is Perkins's recollection; a faculty member placed the circumstances in more polarized terms, calling the terminal relationship with the previous president a "rebellion," and the position paper with which Perkins was presented a "manifesto." An administrative staff member who served in the Perkinsadministration and the one before it called the earlier circumstance a "dictatorship."

President Perkins began his presidency with conversations. "What the faculty really wanted was to have a dialogue with me about where the institution was going, what were my priorities, what were their priorities. We really had a lot of conversations. I talked a lot about values. As a result of the dialogues, we determined that it would be useful to the institution, as a start, to get on paper what our values were."

The conversations led, over the course of about a year, to the drafting and approval of a values statement, a process in which the entire college participated. The values statement that resulted (BRCC, 1990) highlights five core elements. ("BRCC values learning...access to educational opportunity...excellent performance...its internal environment...[and] its community.") Twenty-five subordinated, detailed statements gave more body to these values.

Subsequent conversations led to the communal drafting and production, three years later in 1993, of a vision statement. It's less than 50 words, yet Perkins described it as "a little long." The process, considered as a whole, has progressed toward a more concentrated distillation of what is important to and at Blue Ridge Community College.

The values statement and the vision statement in many respects bypass that document more common to institutions across the country, the mission statement. That mission statement's development was driven in large by a mandate from the Virginia community college system and is derived in large from the system's allocation of responsibilities. The BRCC mission statement is broad and inclusive in its mandates. "It's a huge umbrella," said President Perkins, "which basically says we should be all things to all people....We've said, OK, but for Blue Ridge, what is our vision within that statement?"

The vision statement announces the college's intention to enhance its educational environment by the year 2000 through three primary initiatives: creating new and stronger partnerships that will enhance students' higher education and employment opportunities; becoming a model in the use of technology; and enhancing a sense of community within the college.

Both the values statement and the vision statement were the products of long, drawn-out discussions and have been subject to revisitation on many occasions. But both statements have held virtually intact since their initial production. A strategic directions statement (a staff member never before involved in planning under the college's previous administrations suggested that it was a "directions" statement rather than a "plan") created subsequently to these items. Although it is only about 2,000 words, that statement took several months to finalize, and went through 37 drafts. The strategic directions statement, accessible from the college's homepage on the World Wide Web (http://www.brcc.va.us) affirms directions for the college in a five-year period through 2000: responsiveness to the community, enhanced educational programs, strengthened student support services, exemplary use of technology, and resource development. Among the statements concluding remarks:

> Responsibility for nurturing an environment that encourages creativity and risk taking will rest with the president. The College budget development process will give highest priority to funding those initiatives which support our strategic directions....The deans, division chairs and other Planning Committee members will present a semiannual report to the president summarizing progress in implementing the plan. This report will be made available to the College community and will provide everyone with opportunities to focus new initiatives toward what is needed most.

The processes and the statements have empowered the college and Perkins to take specific steps in support of the college's direction. The college, at the faculty senate's initiation, has moved to a 100% merit-based reward and pay-increase system; as Perkins noted, "some get zero and some get nine [percent]." The change from across-the-board increases was based on the articulated values and subvalues of "excellent performance."

Some reorganization has come from the implementation of the statements. When BRCC's director of student services left for another position, she was not replaced. Instead, her functions were put under the dean of finance and administrative services. Perkins made the move without a faculty vote, but only after a series of individual conversations and the establishment of a one-year trial period for the new arrangement. Among his intentions was the integration of functions and making the business process more seamless for students. "In many organizations I've been in," said Perkins, "there would have been lines drawn and battles waged over that because its unusual and because there are good reasons why that's a lousy thing to do....I felt I had permission to act and that I would have [faculty and staff] support." The recombination came through its trial period successfully, by most evaluations, and even, according to Perkins, produced some "unexpected positive results."

Empowerment has come to the president in other ways, as well. The state had a one-time early-retirement offer for colleges. Individuals weren't automatically eligible for it, but could apply for the president's permission to take the offer. The college got to keep the saved salary funds. But the catch was that the institution couldn't refill the position. Only two of 23 eligible institutions in the state exercised the option, and BRCC was one of them. In fact, six positions were eliminated. (BRCC sought and was granted special permission to early-retire two individuals and to replace them.) Previous duties were redistributed or recombined in ways that reflected the strategic directions. "We used the money to support some strategic directions, and that's given us a lot of freedom." Although widely supported within the college for the decisions, one interviewee said, "other presidents thought Jim was crazy. It's just that those other presidents didn't have a sense of where they were going, and so they were frozen in place."

The distillation of values and goals has allowed the college to take a pass on opportunities for program development judged inconsistent or noncentral to its directions, opportunities with the potential to divert critical resources. Despite strong pressure from the state to establish adult literacy programs at community colleges, and to some degree the development of that interest within the college itself, BRCC chose not to sponsor such a program, but instead to support local community groups in the effort with the provision of space, expertise, and consulting.

In February of 1996, the faculty senate approved, by unanimous vote, a strategic directions statement. "You'll note that we specifically said 'direction,' and not 'plan,'" said Perkins. "What most people are used to is a document of 200 pages. This is about five." He noted that of most longer plans, including an earlier, more detailed effort at BRCC: "The first six months, it looks great. The next six months it starts getting filed away, and in a year, it's out of date. The objectives were too specific, the time lines became obsolete. You've got this process that looks very rational, very linear, very realistic, and it just collapses under its own weight." The time frame of the strategic direction statement was 18 months, but Perkins said at that time, "I suspect that after six months it will be rewritten. An 18-month period is helpful to us, but we have to realize that we shouldn't be bound to it, and we'll have to reassess it."

All of this is not to say that planning at Blue Ridge Community College is casual or that it doesn't demand intensive commitments of time. The strategic direction and other initiatives at the college are supported by a background of careful, detailed planning and information gathering. The president relies heavily on a time/function management system called management subcycles. Even as the strategic direction statement was taking form, more detailed planning was taking place to support it, efforts such as planning for a fundraising campaign. But details and timelines, with a heavy emphasis on the immediate future, are segregated from the more universal statements of purpose and direction and the longer-term focus of those statements. The details are almost exclusively administrative functions, with only occasional, ad hoc interest from planning committees.

The general planning process is supported not only by completely open meetings, but by a "liberation of information" (Levin et al., 1995). Virtually all information directly or tangentially relevant to planning activities is made available to the full college community. The primary mechanism for this is an internal e-mail system, upon which are posted, in both a timely and archived fashion, committee meetings, various proposals and reactions from individuals, key documents, information generated by environmental scanning, and so on. Every staff and faculty member has personal access to a computer, some of which are older machines, but all of which are connected to the communication network.

The institutional culture now enforces an openness of records and information. All committee meeting minutes were posted on the campus web site and sent to everyone by e-mail—except the faculty senate. A planning committee member, reacting to a complaint about this circumstance went to the head of the senate and suggested that it was appropriate that those minutes be posted like all others:

> I said let's share the minutes. They said they didn't know if they wanted everyone to see what they were doing. I said bullshit. We went back and forth. We can't have one group that says we don't have to share information, so what we went back and forth about it. Now, we share the minutes with [faculty senate] committees first, but then they go out to everybody on e-mail with the hit of a button.

BRCC's is not a tranquil environment. Perkins spoke of "battles" in enacting some elements of the process. Bernard Levin, a professor of psychology, described committee meetings as places where there can be "shouting and screaming and blood all over the floor." A ranking academic indicated that he and a central administrator had "some words of prayer" when the administrator attempted to bypass the involvement of faculty in a key physical-plant decision. A staff member who came to BRCC from a large university said that people would ask if it wasn't less political at Blue Ridge than at the university. "Are you kidding?," the staff member would respond. "It's ten times more political here."

Hierarchy as an imprimateur of ideas or power is alien to the process. Levin said, "Traditional strategic planning has a committee at the top, with god [sic] sanctifying things. It's stratified by power and position. This is very different." When people contribute to committees, "you leave your [position] hat at the door." Ideas, not professional titles, are the tools of negotiation and discussion, he said. "If your idea won't stand up, then get another one," Levin said. But an idea pursued, and its champions, are not punished when it fails if the idea has gained support through the planning process. "The decentralized institution...promotes creativity...rewards effort...and celebrates success. It views failure as a learning experience and a challenge" (Levin et al., p. 12).

Support for the strategic directions in not unanimous. A knowledgeable source said, "Maybe as many as 30% of the faculty would like to see us do something else. But the process of information, feedback, defending your position, just wears them down if they don't have a good case or are only worried about their own program or department." The 30% figure may be high; 85-90% of the faculty contributed in a recent annual fund drive.

Everyone interviewed at BRCC acknowledged the massive time investments inherent in such a planning process. But Perkings recalled his experiences at institutions where decisions were made administratively without constituent input. "The next six months is spent fighting battles with every group on campus about why it was so important that they do this. People chose sides, with some people not giving 10% to the effort." The realized alternative at Blue Ridge Community College, according to Perkins:

"I have been creating for myself, and the institution has been creating for me, the permission to take some very large leaps once in awhile." Levin et al. (1995) addressed this empowerment by distinguishing between the strategic planning process's "evolutionary" power and the executive's "revolutionary" power (p. 9). Levin, referring in interview to the investment of time and energy, said, "It's either pay me now, or pay me a lot more later." Another individual said

> The process creates some difficulties in reporting to state agencies that want everything just so. One person I work with said it's like trying to nail Jello™ to the wall....But there's so much creativity that comes out these brainstorming sessions. There's no way you could come up with a structure that says that's exactly what we're going to do and exactly what will come out of it.

Some flex is built into the budget for the pursuit of new ideas and opportunities that arise outside the budget cycle. College officials are particularly proud of a $20,000 "strategic initiatives fund" that is set aside to pursue late-arising opportunities that can be tied to the strategic directions. One official said that such contingency funds always existed, but that most people didn't know about it, "so we've made it clear to everyone that we're looking for new ideas and we're looking for experiments. In fact, we have a process for people to identify those projects and find the money for it." An initial project funding an interdisciplinary student field trip to Central America.

Another official close to the budgeting process said, "I am very strongly committed to providing these funds again next year, and the president and staff agree....It's not a tremendously large pool of funds, but I think it's large enough to give pilot capabilities." On the other hand, the same official has helped block initiative fund allocations which couldn't be tied to furthering the institution's strategic directions. It was an instructional equipment request, to replace older equipment. "It wasn't a visionary project. It was more 'here's what we're already doing.'"

The decision-making structure that accompanies participatory planning was a source of some impatience for some members of the academic community. "I think sometimes the decisions are not made as timely as they should be, or are not made at all," commented one person, who nonetheless preferred the Perkins approach of extended consultation. A skeptic of the planning process and atmosphere said, "It's an excuse for inaction. It's the president's job to make decisions and act on them." A planning participant highly supportive of participatory planning said of the process, "It's like passing a kidney stone. But you have to create ownership. Jim Perkins has the thickest skin I've ever seen. He's walking around among people who say that the guy never makes a decision—and I think he's one of the most effective presidents in the [Virginia Community College] System." He added, "Don't you know he must be tempted to make a decision all the time? And he doesn't do it. He won't do it. He makes us make the decision, then we've got ownership."

Trust is the base and result of such a planning environment, confirmed and strengthened by the feedback of its success. "There's more behind this," said Perkins. "It's a trust element. I trust them, they trust me, and we know that we're all working for the good of the institution." Levin offered this comment: "The process works if you trust people. The people we have here are very bright. You turn them on and they come up with some incredible stuff."

Case: Carson-Newman College

Carson-Newman College, in the small East Tennessee town of Jefferson City, is proud of its history of service and survival. Founded in 1851 as Mossy Creek Baptist Seminary, the college has survived tough times. During the Civil War, Union troops occupied the institution's buildings and the seminary remained closed after the war from regional depression and institutional debt. A new president managed to revive the institution in 1869 by undertaking a 3,500 mile, horseback tour to raise $5,250 to pay the college's debt. The recognition of donors and a merger with a women's college led to the renaming in 1889 of the institution as Carson-Newman College (Carson-Newman College, 1996).

However, nearly a century later in 1987, survival had not led to excellence in many demonstrable forms. With about 1,700 students, the college was small but viable, and there were many, to paraphrase Daniel Webster in reference to Dartmouth, who loved her. But Carson-Newman was perceived by prospective students and others, according to one individual in a position to evaluate such images, as a "blow-out-the-candle kind of place. If you can blow out the candle on this desk, you're in." It was, for some students, a college of last resort.

Statistics and physical circumstances gave some support to this view of relatively low prestige. Although the endowment had doubled in the previous decade, it was still only about $8 million, insufficient to support simultaneously a competitive scholarship pool and other initiatives. About 20% of freshman were in "developmental education, with an average ACT score among them of 10.8. The physical plant had deteriorated through the years; a new computer center, library renovations, and a new student center were aspirations widely held on campus, while the administration struggled to find funds for such fundamentals a new boiler. The faculty was aged, without a systematic evaluation program, more poorly paid than at peer institutions, and carried the heavy teaching load of 27 hours a year. The college did little to reflect or celebrate diversity; there was not a single black faculty member.

Among those who desired a change from the status quo, an improved future for Carson-Newman, was Dr. Cordell Maddox, in 1987 a decade into his presidency. He had heard noted academic planner George Keller speak at a conference in Washington, D.C. Dr. Maddox approached Dr. Keller about coming to Carson-Newman, conducting an in-depth study, and producing strategic development recommendations. Keller declined, citing too much current business and too many prior commitments. But Keller was also married to a native of East Tennessee, who had once dated a Carson-Newman boy and who knew of the affection with which it was held by many. Keller's wife informed him that he did have time to direct the Carson-Newman project, a principal recalled, and so the deal was struck. The study was undertaken through the consulting firm of The Barton-Gillet Company, for which Keller served as a vice president.

Maddox's request of Keller could not have been an easy decision, or a lightly taken step of local limitations. Barton-Gillet's study (1987) would later conclude, based on a hundred or more interviews with trustees, staff, faculty, students, and others, that Maddox's cabinet was not strong, and that there were substantial weaknesses at several points of the secondary administrative structure. Faculty felt themselves rarely consulted on substantive issues, and faculty meetings were characterized as skirting real issues. A later interviewee, in conversations conducted during the course of this current study, looked back upon Maddox's first decade in office, before the Keller contract, and called the period one of constant crisis management, a period in which Maddox felt the need to be directive in every sector of college operations. The top-down administrative structure appears to have had implications for academic affairs, as well. Another interviewee said that Maddox was perceived as a strong leader both before and after the 1987 planning exercise, but that pre-plan, that strength was manifest somewhat as "fear....People said, 'I don't have academic freedom, I don't have the right to do what I think right in the classroom.'"

But Maddox himself recognized that the college was at a watershed, and he genuinely wanted the outside, objective opinion. "We brought [George Keller] in and turned him loose," Maddox recalled. "I made the decision that this was not going to be Maddox's plan. I was going to be part of it, but was not going to try and impose my thinking." After the process of campus interviews, document examinations, and other initial research was conducted, Keller and his interview/research associates retreated to draft their findings and recommendations. Toward the very end of that process, Maddox was afforded the opportunity to review--and change--the strategic plan as it would be presented to the Carson-Newman trustees and other publics. "There were some things I would have liked to change," recalled Maddox. He felt for example, that the preeminent attention to athletics charged by many during interviews was unfair, and he would have liked to have seen more specifics, despite Keller's ongoing assurances that strategic plans had to be general and not dedicated to the details of implementation. "But I wasn't going to change one sentence," Maddox said. "I didn't want word to get out that I had made changes and that I wanted it to be mine. I insisted it be [the consultants'] document."

As earlier mentioned, Keller and members of his staff interviewed all members of the college's board, all key administrators, 54 faculty and staff, and 30 students. Several of these interviews were sought by the consultants. All who wanted to be heard and interviewed by the consultants were. In addition to an examination of college data and documents, and the reading of bibliographic materials generally relevant to the role of the Christian college, Barton-Gillet interviewed officials at other Baptist institutions and individuals at other colleges and universities in the vicinity of Carson-Newman. No individuals were identified in the report by name in connection with particular opinions or quotes, presumably to encourage frankness. The report, from the initiation of research until final delivery, took less than five months.

The final report cited several generally perceived weaknesses of the college; the most significant of these were noted earlier. But it also cited substantial strengths. Several academic departments and many faculty members were repeatedly cited for excellence. The college ranked seventh in the nation among Baptist institutions for forwarding its students to professional and graduate study. The genuine atmosphere of Christian community and service were obvious to the researchers. The highly successful athletics program brought regional and national attention to the college. President Maddox was described as skillful and dedicated, and a key factor in the college's steady, if modest, success in fundraising.

The report recommended several factors which should remain unchanged at Carson-Newman College. These included close affiliation with the Tennessee Baptist Convention, remaining at a size of about 1,800 students, the centrality of liberal arts and sciences in undergraduate programs, and competitive tuition rates.

But is was at this point that the Barton-Gillet report substantially departs from summarization of circumstances and the relating of consensus. In only ten or so additional pages notably devoid of detail ("...[A] college...should decide what its central strategy or competitive position will be, and then devise structures that will best facilitate carrying out the strategy," p. 19), the Keller document sets a course for the future that would largely shape Carson-Newman's actual destiny for the decade to come.

Many of the recommendations were centered around the proposed ambition that Carson-Newman become known as the finest small Baptist college in the country by 2001, to become to Baptists what the University of the South is for Episcopalians, what Davidson is to Presbyterians, and what Guilford is to Quakers.

Thirteen initiatives were proposed to accomplish this designation: a five-year, $50-million capital campaign; a strengthened administration, particularly in academics, business affairs, and institutional relations; a curriculum revision to address strengthening the basic principles and values of liberal arts, religion, career preparation, and wellness; improved admission standards; the securement of a Phi Beta Kappa chapter; movement of the athletics program from the NAIA to the NCAA; improvements for faculty to include better salaries and lighter teaching loads; endowment of the library; the establishment or enhancement of a few key academic programs, such as a

Baptist history institute, a children's literature clearinghouse, or a church music center; the establishment of an Appalachian studies major and/or festival; the building of a new student center and field house; improved promotional efforts; and the exploration of new sources of revenue, such as summer programs for high school students.

The report was well received on campus. "There was a feeling everywhere," said one person. "It was, 'we can do this.'" The president indicated that it gave him authority to make moves not as easy to accomplish in the absence of a plan. "We were trying to get a fundraiser cheaply," he said. "You get what you pay for." The university strengthened that and other support offices, and launched a $50-million dollar campaign, as recommended in the strategic plan. The campaign, "Of Minds and Miracles," reflected not only Carson-Newman's accomplishments, but its ambitions. The campaign was a success.

Not all changes initiated at the college were the result of specific Keller recommendations. The president felt that the plan's emphases on Christian and caring values, and the financial strengthening it foresaw as an attainable ambition, gave him the ammunition he needed to go to the board and successfully seek extension of the college's retirement plan to physical plant staff--and to do so retroactively. "We had people who worked here 40 years, and who would leave with nothing," Maddox said. A woman who had 30 years with the college was immediately awarded retirement credits for all of that service. "I had people come to my office at 4:00 or 4:30 in the afternoon, with tears in their eyes. It was a bold move, but the college changed in 1987. We wanted to be recognized regionally and nationally as a good institution. It was the right thing to do."

Other changes were realized as a result of the strategic plan, college-wide commitment to its major premises, and the raising of funds to accomplish it. Enrollment had risen, slowly but steadily, to more than 2200 students by the spring of 1997; that term marked eight consecutive semesters of growth. ACT scores rose steadily during that time. Only 10% of students were in developmental studies by the mid-90s, and the admission scores of those students had improved as well. Graduation and retention rates were up. A new student center, with advanced wellness and fitness facilities, was completed. Faculty salaries were increased, even as 32 new fulltime faculty members were hired, lowering faculty teaching loads by three hours. A faculty development fund, to support professional involvement and research, was established on an application and peer-review basis. The athletics program moved from the NAIA to NCAA Division II. Special fiscal emphasis was put on the library and on computer services for faculty and students. Outside recognitions were earned regularly from *U.S. News and World Report*, for quality and value; *Money* magazine for value; and the Templeton Foundation, for effectiveness in values education.

A particularly notable initiative was the establishment of four interdisciplinary programs, four "Steeples of Excellence." Those Steeples are Appalachian Studies, Baptist Studies, Church Music, and Wellness. (A fifth Steeple, Family Studies, was under development as of late 1997. "Six or so is probably the maximum number of Steeples we'll support," said one administrator, indicating that growth in numbers beyond that would likely dilute emphases and resources for support.)

The college underwent, during the 1992-93 academic year, examination by the Southern Association of Colleges and Schools for the purpose of reaccreditation. As per usual, the first step important step in the process was the institution's self study. A cross-campus committee and several subcommittees undertook that study, and issued a report of more than 200 pages, including a number of recommendations and suggestions. The administration issued subsequently a response to those recommendations and suggestions, noting where progress had been made or was planned.

SACS, pursuant to the examination of those studies and its own visits and investigations, issued to Carson-Newman a ten-year reaccreditation, the longest term available. Most significantly, SACS issued no recommendations for improvement or redress to be considered before the next accreditation or in the interim. "I think that was testimony not only to our planning process," said one principle in it, "but to Dr. Maddox's leadership. He provided energy to implement the strategic plan, and the plan was very important to SACS. Dr. Maddox has the energy of a young man," despite approaching retirement and some twenty years in the president's job.

The college has not been content to rest on its laurels. Seven years after the original plan, a new effort, Strategic Plan II, was launched. "I thought it was time that we revisit the plan and take stock," said Maddox. The newer study was chaired by a well-respected faculty member from the social sciences. Through open meetings, formal governance structures, memos, e-mail, surveys, and informal conversations, and consideration of input from faculty, students, administrators, and trustees, among others, the 18-member Planning and Institutional Effectiveness Committee issued Strategic Plan II in the spring of 1994.

The plan revisited one of the more amorphous goals of the Keller report: what exactly did it mean to become the "finest small Baptist college in

America by the year 2001"? The phrase, according to many on campus, occasioned much discussion and some disagreement during the seven years since Keller's study. Strategic Plan II did not attempt to resolve this definition, but rather again emphasized some areas of commitment that might move the college in a general way toward the goal.

Strategic Plan II was broken into three primary sections, or "areas of concern." These areas were Values and Commitments, People and Programs, and Facilities and Finance. Vision statements were drafted and approved for each of the three areas. Under Values and Commitments, the vision statement indicated that the college "seeks to be a college in which the Christian and intellectual values and commitments of our mission statement are actualized in our academic and student life programs...." The vision statement for People and Programs said that the college "seeks excellence in the people it employs and in its academic programs, student life programs, and administrative practices." The final vision statement, under Facilities and Finances, pledged the college to seeking "a strong financial base and a quality physical plant to support the work of its people and programs...."

The college does not have a single vision statement, as is the case in many other institutions, particularly those having undertaken extensive strategic planning. The college's 1996-97 catalog does, however and for example, begin with an institutional "Statement of Purpose" followed by "Philosophy" and "Spirit" and "Identity" statements. Although not as focused, concise, or memorable as a vision statement, these elements, considered in context, accomplish much of what a vision statement might do: articulate an ambitious and defining sense of purpose and goal.

Strategic Plan II differs from Strategic Plan I in one particularly notable way: detail. Whereas Plan I articulated 13 general goals with very little detail, Plan II noted more than 60 specific steps, goals and ambitions. The president saw this as an improvement over the first plan, but others on campus felt that the detail of the plan made it difficult to relate to as a whole. This was a sentiment expressed even by individuals charged with the ongoing monitoring and and revision of the plan's implementation and benchmarking. Even though Plan II was in many respects just an addressing of the details of Plan I, "people just got overwhelmed" by Plan II. One individual opined that even trustees "just got lost" in the detail. The chair of the committee that drafted Plan II eventually converted the 12-page, single-spaced document to a double-sided single sheet, with 60-some points of the full plan summarized in nine sentences. The summary has been encouraging of more creativity in implementation for some people. "The full document was sort of limiting" in its specific prescriptions, one said. "Are these the only ways to accomplish our goals?" Probably not, was the interviewee's answer; there may be other paths to the desired end.

The processes of planning, self-examination, re-examination, dialogue, and creative solution that have become ways of life in planning at Carson-Newman were given a test in 1995-96. Although the Southern Association of Colleges and Schools issued no recommendations or mandates to the college during its reaccreditation process, it did subsequently suggest to the college--through a SACS-initiated communication--that the association would look favorably upon a decision by the college to change its institutional designation to "university," based on the college's development and its modestly developing graduate studies programs. Additionally, Strategic Plan II recommended that the change in names be investigated, without making a recommendation as to whether the change should actually occur.

Certainly national and local trends were to that direction. In Tennessee alone, Carson-Newman's sister Baptist institutions, Belmont and Union, had become universities. Others making the change including Southern College and David Lipscomb College.

The board of trustees considered making the change unilaterally. But based on President Maddox's recommendation and the success of involving college constituencies in planning process, the trustees left to Maddox the appointment of a task force to examine the question. Five faculty members, three students, two alumni, two trustees, and five administrators formed the committee. The task forced was charged by Maddox to consider carefully the many aspects of such a decision; to keep an open mind, regardless of personal predisposition; to educate the Carson-Newman family on the elements of the decision; and to make a recommendation to the trustees.

The task force opted for a variety of group dialogues rather than a formal, paper-based survey to gauge opinions. It was felt that the give-and-take, the exchange of ideas common to discussions, were more important that ascertaining initial disposition. These discussions led to further study among alumni leaders, community supporters of the college, students, faculty, trustees, and staff. In every case, the consensus that emerged was that, for the present time, the name "college" should be retained. In addition to an inability of the committee to locate research that would affirm the competitive advantages of the name change as claimed by other institutions, the task force determined a broadly held sense that "college" reflected an emphasis upon the individual, undergraduate student; communicated an emphasis on teaching; and represented a unique identity in comparison to large, neighboring state universities. The task force recommended to the trustees, by a strong majority, that the name "college" be retained. The task force went even further, recommending to the trustees that a "year of the college" be celebrated, to emphasize those elements of identity, purpose, celebration, and unique character that the task force's year-long labor had brought to the fore.

In interview after interview, individuals indicated that their initial, personal inclination was for Carson-Newman to become a university, and that they had predicted the change would be made at this first examination of the possibility. But all of these individuals indicated their concurrence with the task force's findings, their admiration for its processes, and a sense that the college had emerged from the latest planning process, again, with stronger sense of community and purpose.

Epilogue to the Carson-Newman Case

By the spring of 1999, Carson-Newman was buffeted by change. The Board of Trustees had recently voted to become self-perpetuating, weakening the link between the Tennessee Baptist Convention and the college. This led to the convention voting to place its annual contribution to the college—some $2.2 million—in escrow, virtually obliterating the income gained by the much-enhanced endowment created by the college's $50-million fundraising campaign. At this writing the issued remained unresolved.

President Maddox has announced his impending retirement, after more than two decades of service to the college. A search committee has been named and has begun to accept applications and nominations for the position.

Faculty and staff at the college see these developments as challenging, but not insurmountable. They have grown accustomed the work and philosophy of shaping their own destiny.

Case: The University of Calgary

Two vignettes demonstrate the contrasting states of the ambitious planning exercise being conducted at the University of Calgary in the spring of 1997.

In the first circumstance, we are in the "Change Room," the headquarters for the planning operations underway. It is much more than a room; the entire, top floor of the Biological Sciences Building is dedicated to the operation, and it has been for some months. There is no noticeable door on the floor's entry, no gatekeeper or receptionist. There are no walls on the floor as such, but rather dividers, partial and only suggestive of separate work areas. No one, including the planning project's director, has a separate office. The arrangement of those at work is similar to a newsroom, where many people's working can be viewed simultaneously.

The population of the area, some 30 or 40 people this weekday afternoon, is eclectic. Senior academics, students, support staff, visitors, members of discussion groups, and consultants work alone or in groups of five or ten. Others would be here, but they've left early to prepare for campus community "feedback" sessions that evening. Some estimates placed the number of individuals involved at one planning meeting, or several, at more than 1,000.

Along the wall are flow charts of activities and target dates, showing overlaid work and consultation cycles large and small, looping back, without clear termination. A group of seemingly random participants is discussing a troublesome definition of "quality," and brainstorming is accompanied by the ad hoc creation of flip charts and summary statements.

A large conference table is filled with summaries of the recent or ongoing planning activities at "rival" universities across Canada. The summaries have been researched and prepared by planning staff in a fairly standard format. On a nearby wall, prime rivals are plotted and checked off when they intelligence shows that they've accomplished one of six or seven key stages in the strategic planning and implementation process.

The director of the effort is Howard Yeager, a biologist and senior academic administrator, and an individual whose own intellectual work, and dedication to making the planning process work, is noted even by the process's most ardent critics. He is assisted not only by the aforementioned planning consultants, but by academics and staff members released from regular duties, for a semester or longer, to accomplish and guide this work. Included among the staff are recent graduates of the University of Calgary, hired not only because of their abilities, but as a systematic way to acquire the benefit of student perspectives.

Beginning in the spring of 1996, the planning group gathered massive quantities of data and impressions about the University of Calgary's internal, external, and global environments. By the fall of '96, based on those analyses and seemingly countless meetings of internal and external constituency groups, the planners presented to the university community, for debate and discussion, possible and alternative "futures." Those contrasted alternatives included a "confederation of faculties," a decentralization of the university with organizational and budgetary focus upon colleges (to use the American term); a "learner centred" university, with particular resource commitment and development upon learning and pedagogy; a "regionally responsive" university, with emphasis upon links to local and Western Canadian communities and economies; a "research dominant" university, with ambitions of expanding internationally prominent efforts; and "thematic excellence," in which broad areas of inquiry and knowledge would extend across faculty and disciplinary divisions. The process, even before any resolution of choice among these areas, was moving into operational considerations, such as the improvement of the library and related resources.

The contextual atmosphere of change and the need for it is actively advanced by key planners. Multiple copies abound of *Transforming Higher Education: A Vision for the 21st Century,* Michael G. Dolence's and Donald M. Norris's 1995, 100-page book by the Society for College and University Planning. Their thesis that we are moving—and must move—from an industrial-age to an information-age model of higher education is widely accepted, and widely discussed for its implications.

Leaders of the process consider themselves fortunate to be involved in shaping the university's future. "I was hoping upon hope that my name might be put forward" for fulltime participation, one leader said. I thrive on change. I love it here." She views her colleagues in the Change Room similarly. "We've had a lot of skilled, talented, knowledgeable people come to this process, people who have capacity for leadership. We can use them all. It's amazing how the cream comes to the top."

The second vignette is more solitary, less on public display. I am in the office of a senior faculty member. He is a respected teacher and researcher, with a heady publication record and a network of professional contacts and prestige that circles the globe. We're discussing the planning effort described above, its status and products.

"There's a lot of frustration here," he says. "We're told that everything is wrong, but never told exactly what is wrong. We're told we have to 'redesign' without any idea of what the design principles are."

The faculty member expresses respect for the intentions of those involved in the planning process, but sees a lack of vision among the governmental and business people who are involved in—or pressing—the redesign. "They don't understand that we do something different than schools or community colleges. Our job is to teach people about the generation of knowledge, and how to generate knowledge themselves. The university leadership needs to express that."

There's a "smokescreen of supposed consensus building that is intended to persuade us that we're involved." But when a recent, landmark directional statement came to the General Faculties Council (a university senate) for approval, "they wouldn't allow a recorded vote. It carried on the backs of ex officio members, of administrators."

The topic of the Dolence and Norris book comes up. The faculty member refers to it as "cultist. It's without content. It's about salesmanship. It's propaganda for their own product and services."

I mention that I've misplaced my copy of the book. "Here," he says, "you can have mine." He pulls his trashcan from under his desk, takes out his copy, and hands it to me.

After our interview, I review his copy and the marginal notes he's made. Early on are on "True" and "1/2 true." That soon gives way to "??"

next to several assertions of the book's authors. The passage "Learning needs to occur at the time, place, and pace of the individual's choosing" (p. 27) the faculty member has written, "Which is why we have books." A passage that refers to contemporary instruction as "classroom-bound" and "lock-step" (p. 28) earns the simple commentary: "Jesus." It appears that it was at this point or soon thereafter, one third through the book, that the book went into the professor's "round file."

The University of Calgary, was chartered in 1966 after spinoff as a branch of the University of Alberta, in the provincial capital of Edmonton. Along with Calgary itself and the area economy, the University of Calgary's fortunes rose with the development and expansion of the provincial "oil patch"—vast and lucrative reserves of petroleum and natural gas. But although the university would expand to more than 20,000 students, with a medical school, a law school, and many graduate programs, and programs in such fields as anthropology and geology that were world renowned, respect at the levels its members desired and felt they deserved proved elusive. For example, the November 25, 1996 issue of Maclean's Magazine, in its sixth annual ranking of Canadian universities, placed the University of Calgary 11th among 13 institutions in the medical/doctoral category. The "reputational survey" placed Calgary a more respectable 7th in the nation, but the cumulative, numbers-driven ranking was pulled down by relatively low admission standards, lower graduation rates, and a sliding financial investment in library resources. (The University of Toronto, Queen's University, and McGill University ranked 1-2-3, as in the previous year.)

Planning was not new to the University of Calgary. Major documentary products of previous planning efforts included 1980's "The

Shrinking Maze," and 1988's "An Academic Strategy for Entering the 21st Century." But these reports and others were characterized by relatively small, administratively-heavy steering and report committees, who largely compiled and evaluated the status and plans of individual faculties. Most individuals asked about these studies indicated that such reports had few day-to-day implications for the university or the people who lived there. There is little evidence that there resulted, for example, much connection between plans and university budgets until the early to mid-1990s (Sheehan, 1989; University of Calgary, 1996). This lack of connection was not of particular consequence during the economic "boom" years of the '80s.

But by the mid-1990s, the fundamental conditions of "doing business" in the university were eroding. The Progressive Conservative (Tory) provincial government headed by Ralph Klein was more conservative than even the previous governments of its party. The ministry with responsibility for higher education was headed by a man without a high school diploma. Governmental priority was placed on the production of employees for provincial industry. Fully 21% of higher education's budget was removed from every college and university, in a three-year reduction beginning in 1994-95 (in annual reduction steps of 11%, 7%, and 3%). Evidence exists that the government's financial crisis was inflated to accomplish spending cuts and redirections mandated more by conservative political philosophy than by financial exigency (Taft, 1997). Nonetheless, higher education, along with other public sectors, was coming to the realization that the rules of funding were changing, and that provincial would likely continue to decline for the foreseeable future. (The Progressive Conservatives, champions of policies of cuts in government spending, were re-elected to power in 1997.) Class sections increased in size. A five-percent, across-the-board pay cut was endured by all faculty and staff, and staff reductions ensued. The library and other operational budgets suffered. It was in this context that the "faculty expressed a lack of coherent institutional vision and direction as a major factor interfering with grass-roots processes of curriculum change" (University of Calgary, 1996, p. 2:4). President Murray Fraser and the standing University Planning Committee in March, 1996, formed the Coordination Task Force, the new, special subcommittee of the UPC.

Although downplayed in official accounts of the planning process, a consulting firm was contracted to help guide the process. It was, and is, a firm well noted in Calgarian business circles, particularly companies associated with the oil patch, for its strategic planning successes and expertise. "There's a tendency to view the external consultants as only bringing in certain process tools that the institution can learn from and then use on its own," said one key university planner. "But they bring in much more than that. There are modern transformational tools that the university's likely unaware of. The university often has difficulty bringing the appropriate scope to its own transformation activities. It wants to revert back to committee work and traditional academic constraints." The planner also felt that the use of consultants helped university personnel avoid "planning fatigue. The consultants bring fresh ideas and fresh techniques and external objectivity to the table."

Shortly after Fraser formed and funded the new planning effort, dubbed Strategic Transformation, he retired. Assuming the presidency was Terry White, who came from a university presidency in Ontario, and prior to that, a faculty and administrative appointment at the University of Alberta.

White stayed at some distance from the planning effort and its public announcements during the first months of his presidency. "He's in the ideal position," said one interviewee at the time. "He can pick and choose from whatever the planning process comes up with." Sources close to the president said that he, although no stranger to decision making, wanted the process to build its own momentum so as to create a sense of faculty and staff ownership, particularly while he developed a sense of institutional values and culture. But he was encouraging of the process, and attended a number of forums to give information and receive feedback. He stressed in those various meetings that he wanted to produce some "quick wins" from the planning process, to approve and fund doable suggestions with relatively low cost and immediate impact; he saw that as important to maintaining momentum and fighting what he called "planning fatigue." But White was said by close sources to be concerned about the consultants that were contracted to the planning process.

It was a concern more broadly and publicly shared by some faculty members, who brought the issue of the consultants orientations and values to public forums and the campus newspaper alike. The interviews of this study revealed a widely held perception that the consultants particularly did not understand or have appreciation for the role of the university in basic research. "The consultants brought in a change process that was very foreign to the university, and did only a moderate acculturation effort. So now you have an alien fit," said one interviewee who worked for the planning effort. One interviewee picked up on a consultant's comparison to companies in finding its market niches. "We're not Wal-Mart and the use of that kind of terminology in the early stage of the planning process was enough to alienate a very high segment of the faculty just when you needed buy-in." The focus on terms like "markets," the same person said, "made things worse at a time when morale was low and skepticism high." Another person offered, "The consultants don't understand universities, but they think they do, which makes them all the more destructive."

There was broad concern as well that the broadly consultive practice was a kind of "false democracy," and that there was a "rush to consensus." "It's like Chinese politics," said one faculty member. "You put a bunch of people in a room. You have criticism and self-criticism. You put up banners, progress thermometers, you create an atmosphere, a compelling atmosphere. To my mind, that leads to a lot of mistakes. It denigrates the academic personality, and frankly it undermines the role of the university in society." Another academic called the process "pseudo-consensual. There's no longer any real democratic process, although it works under that guise. One interviewee: "You have these supposedly open forums, where you try to bring up fundamental issues of values, and they say, 'Well, that's very interesting and important, but we need to stay on task,' and the important issues never get discussed." "It's quite appropriate for this kind of institution to deliberately consider change...on the basis of looking at all the alternatives," another person said, "but what we see is 'rah! rah! rah! Go get 'em! Keep the place hopping!"

Among the faculty members committed fulltime to the planning process, it was several times expressed that the individuals did this at sacrifice and risk to their regular academic careers, that those careers were "on hold." Many critics of the process held a different view. "Many of the people who are stressing that our future is interdisciplinary have never done any interdisciplinary work in their lives," said a faculty member who had published interdisciplinary books. The faculty member asserted that involvement in the planning process was a merit-pay-points option for people who could neither teach nor publish research. "What you end up with is a lot of people who aren't experts in anything but committees and democracy, and they're making the decisions" about the university's academic future.

By December of 1996, the five possible futures had been debated and revised into a single, new vision statement for the university. The statement stressed four principles: that the University of Calgary will be strengthened as a research university, that there would be a realignment of undergraduate programs, that there would be a comparable realignment of graduate programs, and that there would be enhanced emphasis on continuous learning. Those directions were approved by both the university's board and the General Faculties Council in December.

By the new term in 1997, President White charged seven new groups to further investigate and recommend university structural changes and emphases. Those seven task forces were Institutional Positioning, the Library of the Future Task Force, Recruitment and Admissions, Research and Graduate Studies, Revenue and Expenditures, Technology/Information Resources, and Undergraduate Curriculum Design.

And so by the spring of 1997, the period of focus in this dissertation study, the strategic planning efforts at the University of Calgary were poised, but in what direction? Toward the creation of a new future, unique in Canada, with the promise of creation of new resources and educational opportunities even in a time of government cutback? Or a future of "more of the same old smoke and mirrors," to quote one dissident?

Epilogue to the University of Calgary Case

Both progress in planning, and dissent against it, continued apace subsequently to the spring of '97. In November of that year, for example, while tasks forces were in full operation or reporting out their recommendations, the The University of Calgary Faculty Association (TUCFA), the faculty collective bargaining agent, distributed a survey to its membership. A cover letter stated that the Strategic Transformation project was having a "serious impact on the morale of the membership," that is was "administratively driven" without adequate faculty participation. TUCFA asks respondents to help shape TUCFA's "response" to these developments (TUCFA, November, 1997).

TUCFA would three weeks later report that only 26% of the faculty felt that they had a good understanding of then-current Strategic Transformation proposals, only 19% felt that the process was academically appropriate, 20% supported the directions of Strategic Transformation, and only 29% felt that a need for change had actually been identified in the lengthy process. Keith Archer, a TUCFA member, a member of the Strategic Transformation effort for most of 1997, and a member of the Library Task Force Situation Assessment Team, responded to these figures in a December 1, 1997, letter to the campus newspaper, the Gazette. He criticized the survey design and report as intentionally eliciting responses favorable to its authors' dispositions, as failing to report a response rate and margins of error, and failing to separate for analysis the main then-current functionings of the Strategic Transformation efforts. As to TUCFA's charges of poor communications and input, Archer cited, in the case of his own library group but with the feeling that such efforts were typical of other charged planning groups, presentations to the faculty in formal settings, open community meetings, the copies of draft and interim reports sent to all faculty offices, copies of the same on reserve in the library, and special web sites with all documents and the opportunity to comment upon them. "It is difficult for me to understand what more could have been done," he wrote.

In a December 8, 1997, Gazette response to Archer, TUCFA President M. Anne Stalker did not release survey-return rates, claiming them to be "strategic" for a collective bargaining unit, but she did assert that the return rate was among the better ones ever experienced by TUCFA. Despite her concession that "in all of the reports are at least some excellent ideas and good people behind them," she held that the process was driven by "administrative fiat, including faculty members but not faculty representatives." The academic staff, she held, "are frustrated, worried and angry about a process that has gone off the rails."

By the spring of 1998, President White and the administration had made response to several prominent suggestions emerging from the planning process. Among these developments: a strategic "clustering" of faculties for enhanced, interdisciplinary efforts and more effective external fundraising and other activities; a $1.75 million increase in the library budget, with an anticipated increase of $550,000 each year to compensate for inflation; an 8% increase in undergraduate enrollment application, in seeming result of the new emphasis and investment in marketing; a $300,000 allocation to reduce the size of first-year classes; creation of a new Learning Commons centre and staff, to provide equipment and training for technology in education and research; special support extended to 12 research programs determined to have international significance, in areas as varied as cancer biology research, creative writing, and upper atmosphere physics; and the establishment of a $1.3 million fund to support pilot projects at the university consistent with transformation priorities. Many of these efforts had drawn private and even some special governmental financial support.

But all was not as fully implemented as the strongest supporters of the planning process would have hoped. "The president hesitated at the brink of real change," one of the planning process's advocates reported in early 1999. "and the provincial government is still not investing meaningfully in higher education." Nonetheless, a person involved in the planning process from its origins until today assessed progress as "very impressive" on many fronts, despite some new programs still "needing to find their sea-legs."

"There are all these futuristic scenarios being floated around with enough people distracted by them that they are potentially dangerous," a critic said. Another: "It's been a huge waste of time and money, with no noticeable effects."

A key planner reviewed President White's role in the planning process critically. "He still has the vision of the president as a lonely hero. He looked at the strategic plan, found things it didn't cover such as a reorganization of the faculty, and made that his own." The observer said, "The initiative has basically gone nowhere. It's superficial."

A critic said in the spring of '97: "There will be no failure. I cynically tell you that. Data isn't an issue, nor is actually talking with professors about what goes on in their classrooms. It's not a rational process. It's a social, political process." The same critic, two years later: "The range of opinion about these kinds of things and assessments of their success continue to astound me. I think it's a sociological question, not a planning question."

In any case, it will be difficult to assess the impact or "success" of the University of Calgary's Strategic Transformation for years to come, as long-term projects are ramped up—or not—and those efforts produce beneficial results—or not.

Likely earlier but certainly by the spring of 1997, just when the planning processes at the University of Calgary seemed to be peaking in activity and be on the brink of returning some results, opposition began to become more cohesive, vocal, and consistent in their criticisms. A further, special extension of the chaos metaphor may help to conceptualize and analyze this circumstance. That concept borrowed from chaos theory is *bifurcation.*

Bifurcation is the division of a chaotic system into two distinct systems, perhaps running side-by-side, so to speak, as the result of the intervention of specific turbulence (Briggs and Peat, 1990).

Bifurcation in the case of alignment for or against the University of Calgary's strategic planning efforts may have been inevitable and to some degree desirable. The university culture, as more than one interviewee indicated, is based upon critical, continuous review of concepts and common wisdom. As the largest by far among the case-study institutions, the University of Calgary most clearly fits the definition of a "multiversity" (Kerr, 1963, 1995) and thus may find less attainable, or even desirable, unified organizational commitment to common purposes or plans.

But it would appear as well that some conditions particular to the University of Calgary's planning efforts exacerbated the development and rigidity of the bifurcation. Among these was the choice of the consultant to the project. Skilled as they may be in facilitating change processes within industry, their language, assumptions, and understanding of the university and its purposes left cold many individuals whose buy-in and participation would be helpful, if not critical, to success.

The University of Calgary's current planning effort commenced in a context of the announcement and implementation of a three-year, 21% cut in the provincial appropriation to the university. This circumstance is one that would logically lead to fear of and distrust of a planning process that would openly eschew further across-the-board cuts in favor of selective financial investment—and by implication, reductions or eliminations of current programs or personnel. Indeed, much of the open (and interview-revealed) opposition to the planning process was centered in the Faculties of Education and Social Sciences, areas commonly under fiscal assault as fields closer to the "market" benefit from proximity to external economic drivers (Slaughter and Leslie, 1997). As one interviewee at the University of Calgary noted, "When the water hole shrinks, the animals look at one another differently." An untestable hypothesis is that there might have been more trust in the process if it had been initiated prior to crisis circumstances, but the process would have been absent much of the sense of urgency and need which drove it as well.

Fiscal circumstances also impeded the ability of the university to implement recommendations of the planning process, even where they were endorsed. Several interviewees within the planning process noted that the hopes that the provincial government would respond to the planning effort with special financial support were only partially realized. Even a concerted effort to gather private and governmental investment, combined with redistribution of current finances within the strictures of multiple fixed costs, means that the effort of transformation, even fully embraced by leadership and the university, might take many years to implement and yield evidence of results.

Case: Red Deer College

In the fall of 1996, I met with Dr. Dan Cornish, president of Red Deer College, a two-year institution in Red Deer, Alberta, a community of 60,000 midway between Calgary and Edmonton. The college, with some 4000 FTE, offered both terminal, occupational programs and transfer programs feeding the provinces universities in Edmonton, Alberta, and Lethbridge, among other senior institutions. The college had been recommended to me as a potential case study by members of the Faculty of Education at the University of Calgary, faculty members familiar both with my work and the progress and planning undertaken in the three years of Dr. Cornish's presidency.

The meeting was quite encouraging. Dr. Cornish had reviewed the standards of case selection taken from Keller (1983) and affirmed that Red Deer College's planning model was consistent with those criteria of genuine strategic planning as defined in *Academic Strategy.* Indeed, the college's board of governor's, a cross section of citizens from central Alberta, had devoted much of their fall to the development of a new mission statement, the articulation of the college's core values, and "ends statements" which were to define the desired future realities of life at the institution and its relationship with its community. "I think we're poised on the brink of doing some really great things," said Dr. Cornish, and he spoke of the growing, cooperative relationship among the board members, the faculty, and the administration. Dr. Cornish further reviewed the arguments I had put forth for a chaos-theory-based metaphoric model for strategic planning, and he shared his agreement with most of the principles.

"We're going to be pretty busy until Christmas," Dr. Cornish told me, "but after that, we'd like to participate in your study." I left Red Deer with hopes that I had found another model for successful planning practice as I had surmised to be the case at the American community college among my cases, Blue Ridge Community College.

Fast forward to March 12, 1997. The board of governors is considering, in open forum, the elimination of five programs at the college to meet the demands of financial exigency. The five programs were put on the chopping block only weeks ago, by the vice presidents for finance and academics, working from formulaic criteria they devised. President Dan Cornish attends the forum and hears "testimony" along with administrators and governors, but he is, and has been, physically very weak in recent weeks. A rare--and ultimately fatal--illness has compromised his leadership and presence at the college.

Two programs in particular, music and engineering transfer, have galvanized community backers. Some 4,500 local residents—more than 7% of the community's entire population—have signed a petition to save the music program; the signatures were gathered in ten days. That issue alone has convinced the local newspaper to print a full, broadsheet page of letters to the editor denouncing consideration of the program's elimination.

Over the course of five hours, the governors will hear 25 presentations to save engineering and music. Those offering support to the opponents of cuts include Red Deer College graduates, the head of the local arts council, the Red Deer College faculty association president, and the former dean of engineering at the University of Alberta. More than 150 people are in attendance; the previous weekend, 400 supporters of the music program attended a rally. No one, outside of the administrators proposing the cuts, was present to support the programs' elimination.

The board was scheduled to make its final decision on the cuts the following month, in April. Due to intense public interest, the board moved its decision deadline up to March 26, two weeks hence. At that meeting, they announce that the music and engineering programs will be spared, pending the meeting of fundraising and increased fees criteria in coming years.

Administrators and governors will later review the budget-cutting proposals and their resolutions as "win-win," with the community pledging renewed financial and other support for Red Deer College. Faculty and others take a different view: they have confronted the administration and the governors over capricious and unpopular decisions and have won, at least temporarily. Not satisfied with a stay on the elimination of programs, the college's faculty association votes 63-2-1 to pursue legal action against the board for violation of its own programmatic and budgetary policies. One faculty member will characterize the relationship of the faculty to its governors and the provincial government as akin to an abusive domestic relationship: "We try and try to please them, and still they beat us."

In the fall of 1996, the board of governors worked diligently on what they believed to be a reshaping of the college's future to new realities. Red Deer College suffered the same budget cuts from the province as did the University of Calgary and every other postsecondary institution in Alberta.

1996-97 marked the third and final year of the announced cuts, and they accumulated to a 21% in reduction of appropriation. With one of the lowest educational costs-per-student in the province, the college was already running with notable efficiency, but the provincial government's fiat was across the board.

Still, the administration and the board took on the task of restructuring with diligence. The 1996-99 "Red Deer College Business Plan" submitted, as per law, to the Alberta Advanced Education and Career Development Ministry, evidenced an extensive and realistic look at the college's competitive institutions, its financial considerations and prospects, student demographics, etc. There was a frankness sometimes absent in official documents, e.g. "The President and Chancellor of the University of Alberta have made two recruitment visits to Red Deer, under the guise of a report to the community" (p. 5).

The plan opened with answers to questions with which the governor's had grappled earlier that fall: "Why does Red Deer College exist? and What does Red Deer College stand for?" (p. 1) The governors determined core focus as Learning for Life, and more specifically, the development within students of the capacity to care, and the capacity to choose and develop a path in life.

The governors stated the college's core values: learning centeredness, a welcoming culture, and the managed variety of learning experiences. End statements of a "desired future reality" included the life-long learning of all involved at RDC, service as a learning resource for central Alberta, the maintenance of a welcoming environment for learners, and the offering of a variety of effective and efficient experiences for learners.

The plan discussed the potential creation of some specific programs and centers, including an ambitious, multiple focus Aboriginal Justice and Management Studies Institute. New diploma programs under discussion included licensed practical nursing, expanded social work majors, and pharmacy assistancy. The report notes that an "initial review" of existing programs indicated a need for "further review." The governors indicated that within the next few months, this further review would identity programs worthy of "reinvestment," while other programs might face elimination. None of the programs then considered for further review were identified explicitly (p. 12).

The board undertook this planning with the administration and with considerable dedication. Several involved in those meetings shared the intensity and depth of their experience, aided by a thick binder of planning literature and a regional marketing audit and plan executed by the business consulting division of Coopers & Lybrand. The direct involvement of the faculty was minimal; one faculty member served as an ex officio member of the board.

President Cornish's illness began shortly thereafter to take his energy and his time. "It definitely cost us," said one senior administrator. "The vice presidents are working hard and doing a pretty good job," said another administrator, "but they're not Dan."

The Faculty Association of Red Deer College (FARDC) conducted their annual Climate Survey in November of that year, as was the custom at every postsecondary institution in the province. RDC had historically scored among the better institutional climates in Alberta, as determined by a brief survey with such questions as, "Outstanding performance by instructors is rewarded at this institution," and "This institution encourages and supports open, honest communication at all levels." RDC's climate had deteriorated somewhat from recent, previous years, on every question but an assessment of the Academic Council's effectiveness. The RDC numbers were slightly above the provincial mean, but RDC no longer ranked among the best-climate institutions (FARDC, 1997).

Soon after the administration of the survey, the administration—and particularly the vice presidents for finance and academics, who were taking on more duties from the president and who had led the subsequent evaluation of programs promised in the business plan, announced the impending closure of five programs: music, engineering transfer, an automotive program, and two office administration concentrations. (The latter three programs were small, with low student demand and few interested constituents.) The proposed cuts were a new circumstance for RDC, even in this era of financial pressure. "I think," said a governor in reviewing the board's actions, "that we didn't react quickly enough when the [three-year provincial] cuts were announced. Other colleges did, we didn't. We cut very few staff. We tried to keep all our courses in place, and in hindsight that was a mistake. I don't think there would have been public outcry if we'd made the cuts initially."

Faculty felt, broadly and at high levels of formal representation, that the programs targeted for elimination were selected arbitrarily. (It should be noted that no faculty members quoted in this case were members of departments with programs identified for elimination.) The administration, said one person, "has drawers full of annual evaluations of programs, and they didn't even look at them. They ignored them. They made up new criteria and just did a hasty job." The "hit list" was "whimsical and personal" said another individual. One faculty member offered to gather additional information on the programs. "They said, 'Oh, no, thanks, we've got all we need.' We told them we didn't believe that was the case, and gathered and presented more information anyway."

Trust was a casualty of the retrenchment battle. RDC has a history of no-confidence votes in presidents, and Cornish's three immediate predecessors "left before they were ready," said a faculty member. Still, many offered comments to lead to the conclusion that faculty-administrator relations were at an all-time low. "Dan's all talk," said one. "You have to listen very, very carefully to what he says, because it's always open to more than one interpretation." An administrator said, "People don't have any problem standing up in a meeting and calling me a liar? What's with that? How 'bout if I go into their classrooms and call them liars?" Another administrator said, referring to several faculty members, "Dan Cornish is ill and has invested painstaking time, an incredible amount of time, and then they demonstrate true disrespect and true irresponsibility....It relates to management's right to manage." The "entire faculty take on this is 'not in my backyard," said yet a different administrator. "I think that after adequate consultation, you make a decision. I think everybody's sick of the consultation meeting thing."

A common point of agreement among many faculty and staff, however, was the utility of the mission statement and related pronouncements. "It's the biggest waste of money and energy I've ever seen at this institution" (administrator). "Utterly worthless" (administrator). "Everybody says we have to follow the mission statement. But what does it say? Everything and nothing" (faculty). "It's just motherhood, fatherhood, nothing of substance" (faculty).

Shared also was a general cynicism about planning efforts at RDC. "From maybe '85 to '92, it seemed like we did a strategic plan nearly every year. Then they go the shelf and we forget them," said a faculty member. Asked if a recent plan had made a difference at the college, one of its chief shapers said bluntly, "No. None." An administrator referred to the same recent plan as a "non-starter" and "DOA."

"Once you've written a report, you have to make some efforts to carry it out," a faculty member said. I just can't see reinventing the wheel every time. Budgets here are not seen as planning instruments—it's all ad hoc. People aren't opposed to a plan now because it will bring change—but because it doesn't bring change."

And so in April of '97, Red Deer College approached the future with a gravely ill president; declining morale among a faculty who chose to file suit over the college's decision making; hostility between faculty and administrators (or at least some of them); a widely varied sense of the meaning of a public uproar over program cuts; and little confidence, from many sources, in planning itself as a viable tool for Red Deer to shape its future.

President Dan Cornish had, in the fall of 1996, affirmed the presence of a positive direction in Red Deer's planning and the college's suitability as a case study. But by the spring of 1997, conditions had deteriorated to the degree that assessment of positive direction would be difficult to support.

Several key elements seem to have contributed to the conditions extant, perhaps most obviously the vacuum of definitive leadership caused by Dr. Cornish's disability. "We just ran out of time," said one administrator, referring to the targeted programs. "We were dealing with [budgetary] cancer," the individual said, with apparent dramatic stress. "We had to act, or the college would die."

An erosion of civility in discourse seemed to accompany the escalating crisis. Exacerbating this circumstance was a history of roiled waters in faculty-presidential relationships before Cornish.

The provincially sponsored fiscal pressures were not to be discounted in poor morale and relationships. The attempts to live with decreased budgets had included pay cuts and even some layoffs prior to the programmatic targetings. "This is a community," one person said. "It hurts, even if it's not you."

Planning itself did not enjoy a good history at RDC. The major effort previous to that initiated under Dan Cornish was begun and largely completed before Cornish arrived at RDC, in the absence of any but an acting president. Although the planning featured a full-day retreat of college personnel, several people, including one dean, refused to participate. "Why should he?" said one observer. "There was no incentive, there was no punishment. Nothing." Several people noted an historic lack of connection between planning and budgets. Planning—serious planning, with real implications—was deferred repeatedly until fiscal conditions came to a crisis stage and incremental address was no longer sufficient.

Finally, a glaring circumstance seems to be that the locus of planning was the board, and not the faculty or otherwise within the day-to-day life of the institution. "They don't live here," said one faculty member, "and they don't know really what's going on." Another faculty member said, "The administration makes it all smooth and easy for the board. They don't have any feeling for what we're dealing with."

Epilogue to the Red Deer Case

In May of 1997, a small group of administrators met with President Dan Cornish. "We loved him, but we had to tell him, 'Dan, it's time.' We needed leadership," said a person involved. Cornish agreed and went on medical disability. Academic Vice President Lynne Mulder was appointed acting president by the board of governors.

"But I told them I didn't want to babysit," Mulder said. She initiated a series of actions, in cooperation with the board. Four new members were sworn in, filling new terms. The board moved to reconfigure itself, to a mode of governance less involved in daily operation of the college. "They quit meddling in the purchase of paperclips," said an administrator "They established direction and performance criteria for the college and president, and then put day-to-day decision making where it should be, within the college and faculty."

Mulder invited deans and faculty members to join her in the determination of a "five-percent solution": the cutting, or finding from new sources, some 5% of the college's $19 million academic budget. It was accomplished through enrollment expansions where that could be done without new personnel costs, fundraising efforts, some new efficiencies, and the layoff of only one staff member and one faculty member.

A new president assumed office in September; Mulder declined a candidacy for the permanent position. Engineering, rather than being eliminated, has been expanded, and a new program in computer science has been created. Music as well has survived, albeit with fundraising targets and increased student fees. Funds have been set aside to pursue new initiatives, or at least their piloting.

The college defeated the FARDC in their court challenge of budgetary cutback decisions. But most assessments are that morale is on the mend. "1997 was a terrible, stressful time," said one individual. "But it's getting better."

The Propositions and Case-Study Experiences

Following is a revisitation of the propositions, in light of and further illustrated by the planning experiences of the four case-study institutions.

Proposition 1: The ideal outcome of planning is planning, not a plan. The strategic plans and related documents particularly of Blue Ridge Community College are very short, by comparison to other institutions within study and in contrast to the misson statements of most institutions (Keller, 1987). A Blue Ridge faculty member has a useful analogy: "When you look at the American Constitution, you see a very short, very flexible document. Because it's flexible and basic." An administrator at BRCC raised an alternate analogy to government: "Most of the plans and presidential thinking I've seen elsewhere is tied to old theories, it's hierarchical, heavily structured, everything is going to happen boom, boom, boom. These are like Communist five-year plans, like you can predict crop production in five years. In practice, everybody forgets about it three months after its written, except that lonely person who takes it seriously, does everything according to that plan—and then finds out they were doing the wrong thing all along, because things change." There is irony and paradox in the need to envision a future and the need to be flexible in its address. President Perkins referred to a plan implementation document: "The time frame is 18 months, which is a helpful length of time. But I'm sure we'll need to revisit it in six months."

Cordell Maddox at Carson-Newman College had only one general criticism of the strategic plan developed by George Keller's firm: "I felt like it ought to be more specific. Keller reminded me that it needed to be general. It's a strategic plan, and the college is going to have to decide how to do these things." CNC's Strategic Plan II may have evidenced the absence of Keller's counsel on this issue. It is substantially longer than Plan I, although clearly in its spirit. But planners and those charged with Plan II's implementation found that it didn't have the same powers of animation of Plan I. It was substantially shortened to a two-page summary. "It just had to be more digestible for people," someone said. "The thing to remember with a plan," said a faculty member at CNC., "is that it's not a destination. It's a journey."

Plans, or their mere creation or existence, have no powers of animation. As a faculty member at Red Deer noted, "we'd produce a plan a year, it seemed," but it was an institution operating without daily, ingrained reference to a plan. The University of Calgary had a history of producing long, perfectly-bound, "beautiful" plans, but they were episodically launched and not well connected one to the other, let alone to daily life within the institution. They were long on details, but short on their reach. A faculty member: "You look at what the best people have been doing here, and they're so far out in front of those plans...."

Proposition 2: Planning begins with a distillation of the institution's key values and purposes. Ironically, it was at Blue Ridge College that it was several times offered that official planning documents were "a little long, but we're working on it." But what was also clear was that the shortening efforts were aimed at even greater distillation toward the institution's key purposes and directions. "It allows everyone to work off the same page," said one staff member, who, like others at the college, could recite key documents from repetitive use. An administrator offered that the documents produced through long, tortuous meetings and processes, and from which all operational documents subsequently flowed, were his "bible."

At Carson-Newman College, a faculty member reflected on the relative simplicity and on-target-ness of Keller's report. "The potential was always there. I saw the plan as encouraging us to bring that potential to actualization, to more fully reach our potential." The only element of the first plan that met some resistance or revision over time was Keller's assertion that CNC could be the "finest small Bapist College in the country." As the plan operationalized, people asked, "What does that mean?" For some, it meant nothing. For others, it would be the result of meeting more specific aspirations, and not an operational goal in itself.

The issue of fundamental values and their assertion became a flashpoint at the University of Calgary, introduced perhaps, but certainly exacerbated, by the use of a consultant external not only to the university, but to academe. President White was said by some interviewees to have expressed reservation about the consultant, perhaps driven by faculty reviews that "that this process recognizes the importance of breadth, but not depth." An early consideration in the planning was the merging of faculty units: "People from the corporate world think of that as change. It's really not fundamental at all," said a faculty member dismissing the consultant contribution and implied values. "We're not Wal-Mart" was another comment. A key person in the planning saw the failure to "acculturate" the consultants to the values of the university as "a horrible mistake." "There was some cynicism about the consultants," said another key planner, "but I think we've turned that around." Even if that is so, time was lost and energy dispersed in the recovery effort.

To be useful, the values determined and asserted must be well thought and institutionally specific. The Red Deer statements read well, but are broadly assessed by administrators and faculty as "useless," "motherhood," "wannabe," and "everything and nothing" platitudes.

Proposition 3: The widest possible universe of information should be made available to all members of the institution. This universe of information includes ongoing, rich, and current feedback. The case of Blue Ridge Community College offers, among the four cases, the example of an institution committed to both the open flow of information (a "liberation of information"), and the consideration of feedback as part of that information base. The simple document which went through 37 drafts over several months is one of the clearer examples of that commitment, typifying BRCC's belief that only this kind of feedback, and access to information that made the feedback meaningful, leads to planning processes and products that are worth any investment at all. "There's a ton of information on the table," as one person put it. Beyond making for more informed input into the planning process, the sharing of information would seem to contribute to the effort to reach near-consensus on planning steps. "You constantly share the information so no one can come back and say they didn't have the info." "You hear people's voice," said another faculty member. A common notation among interviewees were ideas of quality and substantial direction for the planning process which were put forward by lower-level staff members who would be absent from the planning process in many institutions. "You just never know what's going to come out of the brainstorming."

At Carson-Newman College, this proposition was demonstrated first through the substantial outreach that the consultants made to involve any member of the college community who wanted to be interviewed. The broad receptivity into which the plan was delivered by the consultants would appear to affirm its reflection of broadly held aspirations. The college continues to monitor its state relative to the plan by the appointment of a planning officer, whose duty it is to collect information, both qualitative and quantitative, from administrative and academic departments, to make semiannual reports on the state of the plan, and to widely distribute those reports. The outcome of the discussion of changing from a college to a university surprised those charged with gathering information and making reports to the president and board. They sought, and received, input different than their own initial impressions, and "changed their minds."

The University of Calgary's planning process was marked by hundreds of public meetings, purposefully constructed focus groups, dissemination of information and planning progress through the campus internet and publications, regular formal reports, and a leadership commitment to open information. There remained doubt, however, among dissidents that the effort was as genuine as it should have been. There was a sense of "false democracy" and and a "rush" among these individuals. "In a package we received, there was a quote to the effect that we could no longer afford collegiality...that you can't be weighted down by the deliberate process of consultation that you might associate with collegiality....My thinking is you can't adapt to change unless people buy in, and they're not going to buy in if they think they're being sidelined." Whether the impression could be justified by "objective" analysis or not, it was a widely held impression, and one that contributed to a lack of embrace of the planning process and its products.

At Red Deer College, the disfunctionality of communications seemed palpable. Administrators were accused regularly of ignoring input and the established criteria of institutional decision making; they were even called "liars" and "crooks." Faculty members were considered by more than one administrator as people who "have no respect, no interest in this institution....I'm sick of consultation." The locus of planning, the board of governors, seemed to create another opportunity for or impression of information suppression, via "sugarcoating" of information by the administration. "[The governors] are not really involved in the lifeblood of the college....There's [the issue of] background knowledge and the culture of the college." And, "The place is falling apart, and at the board, everything is smooth. Something happens in the transfer of information as it's filtered back to the board."

Proposition 4: Dissent and conflict are creative, healthy, and real. The absence of conflict is reductionist, illusory, and suspect. Planning meetings at Blue Ridge Community College have been places of "shouting and screaming and blood all over the floor." Authority was not deferred to in such circumstances: "If your idea won't stand up, get a new one." "If [a professor] doesn't have a fight, he'll pick one." Yet it is a process in which people have been able to keep conflict within creative bounds and to reach a high degree of consensus about institutional direction. It's a tone set in part by the administration: "[President] Jim Perkins has the thickest skin I've ever seen."

Red Deer College, by contrast, is an institution where conflict was becoming more open, but was not well channeled toward resolution of differences, as symbolized by court action against the board and administration by the faculty association, an action supported by the overwhelming vote of the faculty. It is an atmosphere which appears to have been created in part by the deferral of conflict, and hence a lack of resolution of underlying issues. One faculty member referred to it as an ongoing "false tranquility. Another said: "Rather than debating our differences openly, we tend to go and talk to somebody else about it. If I have a disagreement with someone, I'll go talk to their supervisor or colleagues and say, 'Look what this guy is doing' rather than go to that person." When programs were saved from elimination, administrators described the community's involvement as a "win-win" situation; faculty members regarded it as a win *over* administration, and winner take all. Red Deer's culture had polarized to the extent of making creative dissent and dialogue very difficult within the institution. As an interviewee at another institution said with regard to institutional conflict, "You need reasonable protection so people won't hurt each other. You need boundaries."

Faculty dissidents in the planning process at Calgary resented their categorization as people irrationally or selfishly blocking change because of their objections or continued questioning. A quote from a planning task force member in the local daily paper agitated a faculty member: "We are, quote, 'paranoid.' This is condemning unjustly and arbitrarily professors for raising criticism. This is part of our job. And yet, you raise a criticism, you're not on the team, you're part of the problem, you cannot deal with change." A faculty member generally friendly to the planning process: "I've heard others express that if something went on the table outside of what the leaders want to discuss, it was dealt with in a way that said, 'Well, we'd like to talk about that, but we have only a couple of hours so we have to stickto our agenda.' So we have people thinking that this is orchestrated."

Proposition 5: Linearity doesn't work in strategic planning. It doesn't work in dictation--planning and plans imposed from above--or in collation--planning and plans created solely by the collection of unit information. Red Deer was no stranger to planning, but it was top-down planning, board-directed and -drafted. For several years, one faculty member observed, "We did a strategic plan nearly every year. Then they go on the shelf and we forget them."

The University of Calgary had several previous, major planning processes. But they were marked by the collation of information from academic units and their collection as a master document without development of a central sense or specific mission. "It was a very decentralized process of planning, but there wasn't anything that pulled it all together at the institutional level." That experience of bottom-up "planning" informed the planning process at Calgary in 1997. But just as informative was their developing sense of the failure of top-down planning. A person who worked full-time on the UC planning effort:

> We did benchmarking with other institutions. We had access over the web to the plans of several other institutions and some of them looked terrific. But when we examined them further, when we would make phone calls to ask them how their plan was going what progress they've made, time and time again we found that the plan barely got past stage one. It was a top-down plan, because it clearly was the vision of one the leaders. So there wasn't buy-in by academics, and academics are very good at sort of lying low and allowing things to pass. We're

> very skilled at saying, "That's very interesting, very interesting. Let me think about that. Let me take that to my colleagues." So all those plans died.

Proposition 6: The institution should budget--fiscally and psychically--for failure. Pilots are alternate futures. Not all can be realized or succeed. There was a clear sense at Red Deer College of a lack of connection between planning and budgets. "You'd get [a plan] drafted, you'd present it to the board, and bingo, on the shelf it went. When it came time to develop budgets, it's back to ad hoc decision making," said a faculty member who'd had experience sitting on the board as the faculty representative. "So people are cynical about it. They're not opposed to a plan because it brings change, but because it doesn't bring change. It's not being used as it's supposed to be used." There was also evidenced at Red Deer a sense of punishment of projects which failed. A joint college-business project didn't produce as anticipated and had to be abandoned. "The faculty was screaming for somebody's head to roll. Not everything is going to work," said an administrator. The necessity and benefits of experimentation, and failure, was the subject of one scientist's observation: "In the past, we only wrote in journals what succeeded, so I know that people were repeating failures one after another. My experience is that for every successful procedure, I probably tried ten times before I made it work. We have to do that same kind of stuff in the kind of endeavors we're looking at at the college." There is evidence at Red Deer, however, of moving toward more experimentation and funding of it outside of the annual budget process, even in tight times. A strategic initiative fund to support new efforts was established during the interim presidency of 1997-98 and continues under the current administration.

Blue Ridge Community College established such a fund in the 1996-97 school year, a few years into the ongoing planning process. While only $20,000, the fund provides piloting of new ideas that "aren't part of the normal business or budget of the college, but they just come up," said an administrator. "We've made it clear that we're looking for ideas, for experiments, that in fact we have funds or we'll find the money. Another administrator noted that the fund was begun late enough in the year that not all of it was bid for or used, "but we don't have a use-it-or-lose-it policy. We can carry-over some funds to next year. And I'm very strongly committed to providing these funds next year....It's not a tremendously large pool of funds, but it's large enough to give pilot capabilities." An interdisciplinary trip for students to Central America was a funded initiative, but standard replacement of audiovisual equipment was turned down: "[The committee] felt it wasn't a visionary project. It was more, 'Here's what we're already doing.'"

"There should be a protocol," said a faculty member at the University of Calgary,

> that says you search for what went wrong [in programmatic experiments] as opposed to a protocol that says you search for who made the mistake to be held accountable....This place has to be the motherlode of free thinkers, people who are pushing the edge....If I don't get to see the small failures I'm going to be scared that we're trying too hard to get it right. We're going to put ourselves in the position of having only one victory at a time.

An administrator indicated a longstanding willingness for Calgary to fund, when possible, special initiatives outside of the regular budget process. "We're quite eager for people to come to us and say, 'Look, I've got an idea that would do this, this, this, but I need $10,000 to start it off.' We'd definitely like that. We'd do everything we could to find that money." The same administrator added:

> You've go to be prepared to put up with a certain amount of failure. Absolutely. You can't put up with everything being a failure, so you've got to look at the stuff in a judgmental kind of way. But you have to take some risks in this business. You have be prepared to take a fly around.

A faculty member involved in planning said:

> It's important that we have a reputation for encouraging creativity; for encouraging exploration; for encouraging taking risks. Because when we implement some of the changes we're proposing, we're going to depend on some risk takers to take the first step forward. It's very important that we nurture that kind of environment where people feel very comfortable and secure taking risks.

One of tangible outcomes from the planning process at Calgary has been the establishment of an explicit fund supporting proposals for change and innovation consistent with the strategic initiatives. The fund is more than a million dollars.

Proposition 7: The considerable expense of time on the front end is an investment. It is recouped, with interest, in the future. The planning process at Carson-Newman College began with a six-month consultancy and hundreds of interviews. The planning at the University of Calgary was massive, in terms of human, time, and financial investments. But perhaps the clearest contrast of the consideration of planning time as an expense or an investment is presented by the two-year college cases, Blue Ridge and Red Deer.

"It's pay me now or pay me later," was the way a faculty member at Blue Ridge put it. Another said, "Lots of time you think you don't have time [for planning]. But if you don't take the time to do these things, then it costs you later. I prefer to deal with it up front." That faculty member noted the example of an administrator who was repeatedly rebuffed, in making unilateral decisions, by an institutional culture that placed a premium on consultation and consensus.

> "He could have backed up a bit, gotten buy-in. He's improving. If you don't deal with it [consultation] early, you still will have to deal with it. When that happens enough times, you start learning. He said he knew that, but I told him knowing and doing are two different things.

The administrator referred to had come to embrace the consultive process. As he said,

> I stepped on some toes early in my career here. If there's groundwork in bringing people aboard on what you're trying to do, even share with them the tactics of how you're doing it, it's not an issue. There are individuals who like to participate in the decisions. But the majority of people, as long as you keep them part of the planning process and keep them apprised of how you're going about it...as long as you can connect what you're doing to the strategic initiatives, there's usually no problem.

There's no doubt that such a process is time-expensive. "We're busier than in a dictatorship," as one staff member put it.

At Red Deer, by contrast, there was a repeated expression of consultation and decision delayed until crisis was impending, until, as one administrator put it, "the shit hit the fan." The possible elimination of programs and the firestorm or protest that followed caused faculty members to claim that established procedures of review were ignored, that criteria were "made up," and that the decisions of the administration couldn't be supported by objective evidence. "They just did their hasty job....I haven't heard a single person who has anything good to say about what was done over the last three months....The whole process was jerry-rigged."

When financial cutbacks hit Blue Ridge Community College, the time and effort they had put into planning allowed them to make responses that other colleges wouldn't or couldn't, e.g. the optional elimination of early-retirement personnel and the reinvestment of their salaries in other ways. Red Deer, by contrast, was in its final half-year of a three-year appropriation reduction before it moved to consider reduction or elimination of programs. By then, the process was so rushed as to virtually preclude realistic prospects of faculty participation and consultation. One might say there wasn't time to do it right. But it appeared, after the community outpouring of support for the threatened programs, that there was time to do it over.

Proposition 8: The executive is not demoted or minimized. The executive is the most critical shaper and champion of the process. Ultimately, the executive is empowered by the process. "To work here before and after the plan are two different things," said a staff member at Carson-Newman College. "My perception is that people were afraid. Nobody would move without getting presidential authorization. People were in a reactive mode. Now it's much more of a team effort."

Cordell Maddox had been Carson-Newman's president for ten years when Keller was contracted for the planning effort. "We really turned him loose," recalled Maddox. "I had made the decision that this was not going to be Maddox's plan. I was not going to try to impose my thinking." In the course of the Keller meetings, "They never met with me," recalled Maddox, but only gave him a draft final report to read. "They said I had the opportunity to change anything. I said there were a couple of things, but I wasn't going to change one sentence. I insisted it be their document." Maddox said the document gave him and the institution the power "to be bold and take a chance." He credits the document with giving him the rationale to greatly improve staff benefits, even before specific funds were created to support it. A faculty member says "there's a remarkable synergy between President Maddox and the plan."

President Perkins at Blue Ridge credits the planning process with giving him authority to move the institutional payraise policy to a complete merit system (as opposed to across-the-board), and to combine key positions in unconventional ways to redistribute funds and improve services, among other examples. He notes that "there's a dangerous rail that a president walks when there's as much involvement as we have at our college....But you have to build trust. If a president is above the institution, if he acts without a foundation of trust, then I think it's a shallow foundation for leadership." He added, "I have created for myself, and the institution has created for me, permission to take some large leaps every once in awhile, provided that I can connect it back to our values, our visions, our directions." The metaphor of chaos theory, said another administrator, "allows for varying degrees of tight control and loose control depending on the particular situation....It's a balancing act....It's the nature of an organization of highly intelligent, highly self-directed people, and the kind of organization that encourages that."

An administrator at the University of Calgary considered that balance another way: "One of the paradoxes is that a lot of people look to the administration for so-called leadership. But they'd kneecap anyone who didn't observe the democratic and collegial processes that they hold dear. That can stand in the way of change....But it's possible to both show leadership and observe democratic traditions. There are just junctures when somebody has to make a call."

Excessive tightness on the administrative reins as a solution to environmental and budgetary challenges caused one Calgary planner to observe:

> I think 'toughness' in decision making is a common mistake that is used in place of rethinking and reconceptualizing an organization. My opinion is that conventional strategic planning tended to be linear and rigid and fixed, and quite inappropriate, but that doesn't mean it gives way to simply hard decision making. Universities need to reconceptualize their unique role in a postsecondary system..., a postindustrial world. Hard-nosed decision making can help you cut your overhead. But then you're left with the same basic cultural problems. You're smaller and you've still been passed by.

Red Deer's problems in the spring of '97 were in no small part attributable to the disability of the president to make decisions or enter meaningfully into the decision-making processes. "It made our position much more difficult," said one administrator. Another said the de facto leaders of the college were doing a good job under the circumstances, but "we're hurt....They're not Dan."

Proposition 9: That which can be quantified is not to be overvalued, and that which cannot be quantified is not to be discounted. The separation of genuine institutional planning from merely meeting the reporting and forecasting requirements of government agencies can prove conceptually and practically difficult. "There's a godliness about quantification with some people," said a faculty member at Calgary. At Blue Ridge Community College, however, a planner noted that "there's a place for numbers. [But] our strategic directions flow from our values, not numbers. Numbers keep coming into the equation, but we keep coming back to where you want to be. You have to identify your values as an institution before you can take on this process."

It was at Blue Ridge where the limitations of quantification had been most broadly considered. "I like things to be pretty precise," said an administrator at BRCC, "but I know that some of these things we can try to measure and kill by the very act of measurement." He had been at institutions where benchmarking of plans was all numerically based,

> and opportunities arose and you ignored them because you didn't think of them six months earlier. You have to be nimble and flexible. I'm not so much interested in measurable as continual process growth. That's not to say that there are some things you don't need to have numbers for, but I think people knowing it—sensing it—is much more important than proving it.

"We're tax-supported," said another administrator, and the difficulty of trying to correlate a values- and aspiration-driven planning process with state reporting requirements based on numbers. "It's like trying to nail Jello™ to the wall." Another planner noted the difficulty of completing application forms for the Title III grant. "It's ridiculous. They want to know what exactly you're going to be doing with [funded] technology in five years. But at least they know it's ridiculous. They let you revise it every year."

Numerical dependency is not to be confused with objectivity. The protagonists in the program reduction debate at Red Deer College both asserted their positions through numerical evidences—and still reached radically different conclusions. Unexamined or unrevealed were the philosophic or directional imperatives underlying the selection or interpretation of those numbers; what many people considered vital programs at the heart of the institution, an administrator called "a cancer. You've got to cut off the cancer so the whole can survive." When faced with a number that didn't compute into the model—some 4,500 people signing a petition in support of the music program—an administrator concluded that "if you called those people up they would have no idea what petition they signed."

Proposition 10: The future is a creation, not a prediction. This power of agency is the distinguishing context of human chaotic systems. "The future is not a specific," said a Calgary faculty member. "It is not an identifiable entity. It's not random, but it is a creation." Even in the absence of financial challenges, said another Calgary faculty member, strategic planning

> would be the right thing to do. I take the view that we're entering a new era, and that we'll enter several new eras in my lifetime. There's no point in embarking on a process that leads to another kind of ossification....We set about the [planning process] with the kind of idea that we had certain encumbrances of a financial kind. Once we got going, the fertility of ideas that we were confronting almost every time we met simply took over and people, instead of being negative about the whole process, turned into people who were thinking original thoughts. They were enthusiastic. They were optimistic.

The feeling at Blue Ridge is that the future can be leveraged with commitment and input at key points. The creation of endowment funds and strategic initiative monies, ideas growing out of planning, can be significant. An administrator boiled down the institutional budget to a small amount of truly "discretionary" funding. "If you look at the truly discretionary funds we have, and we tack $100,000 a year onto that, that's significant." "We've been able to be creative" with funds, said another BRCC administrator. "That's given us a lot of freedom." A staff member said the commitment generated by participative and creative planning "just blew me away....Everybody says, 'This is our destiny. This is where we want to be in ten years.'"

CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

This study is based in the assumption that metaphors, implicit or explicit, are essential elements of perception and sensemaking, first for our personal lives and by extension to our participation in organizations. Further, this study is based in the tenent that the recognition and examination of our organizational metaphors give us ways of seeing, understanding, and deriving benefit from our organizations at greater depth. The value of new metaphors, developed and explored, is their utility in reorganizing our values and goals, giving us new insights and rewards. Every metaphor is, at best, a partial explanation or patterning of reality, and no single metaphor is a comprehensive, perfect organizational scheme. The consideration of emergent metaphors permits us not only new insights on our organizations, but exposes for our consideration the limitations of prior, dominant metaphors. The ability to see circumstances from multiple perspectives is an acknowledged attribute for organizational and societal life (Morgan, 1986, 1997).

The coining or easy lifting of metaphor is insufficient to meaningful, practical utility. But examined metaphor, subjected to rigorous scrutiny, has implication beyond its immediate description or application. Howard S. Becker, in *Writing for Social Scientists* (1986), dismissed metaphors used casually or by rote, but praised metaphors examined in detail and considered in full for their ramifications to the subject at hand. "Using a metaphor is a serious theoretical exercise," he cautioned, "in which you assert that two different empirical phenomena belong to the same general class, and and general classes always imply a theory" (p. 86). Implication of a theory is a border this study approaches but does not cross. Venturing far into that territory implies a "truth" of the metaphor or a "proof" of it supported by the research. The attempt to "prove" a metaphor would mean that it was not a metaphor at all, but something else. But I would assert that the research described in this study does lend enrichment and dimension to the metaphor beyond that given to it by the root sources and their synthetic analyses yielding the metaphor's propositions.

The research questions posed by this study in the first chapter were:

1. Does a descriptive model of strategic planning in higher education, a model derived from a metaphoric application of chaos theory, help us to better understand and conceptually organize the practice of strategic planning?

2. Does the metaphoric model find support or descriptive enrichment within actual strategic planning practice?

3. Does the metaphoric model, examined and refined through case study, have utility as a set of recommendations for productive practice in strategic planning?

The propositions forming this descriptive model of strategic planning were derived from the consideration of a variety of literatures and sources, and in summary are:

1. The ideal outcome of planning is planning, not a plan.

2. Planning begins with a distillation of the institution's key values and purposes.

3. The widest possible universe of information should be made

available to all members of the institution. This universe includes ongoing, rich, and current feedback.

4. Dissent and conflict are creative, healthy, and real. The absence of conflict is reductionist, illusory, and suspect.

5. Linearity doesn't work in strategic planning. It doesn't work in dictation--planning and plans imposed from above--or in collation--planning and plans created solely by the collection of unit information.

6. The institution should budget--fiscally and psychically--for failure. Pilots are alternate futures. Not all can be realized or succeed.

7. The considerable expense of time on the front end is an investment. It is recouped, with interest, in the future.

8. The executive is not demoted or minimized. The executive is the most critical shaper and champion of the process. Ultimately, the executive is empowered by the process.

9. That which can be quantified is not to be overvalued, and that which cannot be quantified is not to be discounted.

10. The future is a creation, not a prediction. This power of agency is the distinguishing context of human chaotic systems.

As noted in the prior explication of research methodology, the opportunity to examine these propositions was extended to all interview subjects. In those cases where the offer was accepted and individuals did examine and discuss the propositions specifically, the predominant pattern was one of affirmation of their value within the context of their own experience.

However, several individuals offered comments or suggestions centered around issues of absolutism, to the point of error, felt to be carried in one proposition or another. For example, it was offered that not all conflict is healthy (Proposition 4), that some information must by law or matters of privacy be kept out of general circulation (Proposition 3), and that environmentally imposed limitations can thwart the future as a pure creation (Proposition 10).

These were understandable and helpful suggestions, informed by the experience of "real world" planning and hard-earned knowledge that no single metaphoric or philosophic approach to organizations has universal utility. A metaphor is not only a way of seeing, a particular perspective. It is an alternative to, and a contradiction of, alternative metaphors and their insights. Establishment of a metaphor entails, therefore, at least a partial, and sometimes a complete, displacement of reigning metaphors. Statement of the metaphor in terms tending toward absolutism is less a statement of loyalty to that absolutism than it is a rhetorical and conceptual device, a device which allows a new foundation to be considered by displacing the original. This provocation of the established order is an incentive to discussion, examination, and refinement. I believe that the discussion of the individual implications, both within their establishment from previous thought and their consideration within the case studies, acknowledges the limitations and shades of gray carried within the propositions. But I believe as well that the investigation of the case-study planning experiences affirms the essential soundness of the principles of the propositions. In is notable as well that no interview subject who reviewed the propositions, in summary or extended format, refuted any of them in whole.

An individual interviewed at the University of Calgary said this about how the planning process would eventually turn out: "I'll tell you this.

There will be no failure." His meaning was that the process had so consumed people, energy, money, time, and emotion that it was impossible that its evaluation by those deeply involved would be anything but positive. I believe that he might have underestimated his colleagues; many central to that institution's planning process would later give very mixed reviews of its value and tangible product.

But the observation does encapsulate the difficulty, and perhaps impossibility, of making definitive evaluations of planning success or failure. Many individuals within this study, at one particular case study institution or another, would offer radically different views of the same planning process. We are then confronted with the task, for the purpose of this study, of considering the success of a metaphor at describing successful practice of strategic planning where there is the absence of definitive end-assessment of the strategic plan.

Given the impossibility and non-sequitorial quality of "proving" a metaphor; given the absolutism which might be carried in the propositions, absolutism which serves for positional placement but which leave the metaphor vulnerable to dilution through situational qualification; given the challenge of tying the success of the propositions to the quite ephemeral quality of the success of planning itself: the experiential evidence of the four case studies generally supports the propositions. That is to say, there are *general* patterns of success or hints of it where there is *general* alliance in practice with the propositions, and there are *general* patterns of failure or hints of it where there is a *general* deviation in practice from the propositions. Further, others who might consider the same case-study would likely reach similar, although not identical, conclusions about the correspondences of the propositions with the experiences and planning developments at the four case-study institutions.

If we recall that the propositions were drawn in large from multiple sources of classic and highly authoritative thought and experience in educational planning, this is not really a surprise. But their organization under the tent of this chaos-derived metaphor give them conceptual coherency, and starch to stand in consideration with other metaphorical frameworks from which contrary practices might be derived. I am hesitant to assert that these propositions constitute a theory in the sense of the root chaos theory in natural sciences, an explanation of "how things work." But their support and recommendation for practice, particularly if supported by further research, or favorable review within higher education research and practice communities, would suggest that they are foundational to a "theory of practice" for strategic planning.

This is an exploratory study. Explorations are by nature rough, preliminary mappings of relatively new territory. Devils will be in the details of application and practice, but this research supports recommending these principles to those engaged in strategic planning, as both laudatory examples of the benefits of observing these general principles, and cautionary tales of the costs that might be paid for ignoring their underlying logic.

Recommendations for Further Inquiry

As all metaphors limp, as one interviewee put it, so do all research projects, in their design, scope of consideration, prejudices, and quality of execution. But even with this acknowledged limitation, this study does suggest some additional, fruitful avenues of inquiry.

Four cases is not intended as a "sample" upon which universal conclusions can be made. But the initial field consideration of this study's propositions suggest some basis for their affirmation in practice, and potential utility for their prescription of planning practice in other institutional contexts. That affirmation and utility would be enhanced by examination of the propositions in other, varied institutional circumstances. Some of the issues raised by this study were unique to one situation or another. Are these differences random, a matter or interpretation—or intrinsic to institutional constructs? For example, does the persistence of strong opposition at the University of Calgary say more about that particular planning process, or planning processes per se in the context of the megaversity? Further case study might aid in clarification of such points.

More field study might contribute as well in sufficiently greater pattern establishment as to make parallel quantitative research of use as well. For example, further refinement of these propositions and their operational elements might contribute to a survey instrument allowing examination of major points over a variety of institutions, a sample perhaps drawn on a stratified basis for institutional characteristic comparisons. This is not to say that qualitative studies or measurements or considerations are superior or a more developed level of inquiry; rather, a mixed design for further research efforts might lend both breadth and depth to our consideration of these and related principles in institutional contexts.

The issue of leadership and its role in strategic planning was a recurrent theme raised by interviewees, and an element upon which many of the propositions turned for operationalization or some measurement of success. Their is no dearth of literature on leadership in society or higher education. But perhaps more inquiry and consideration would be helpful within the context and goals of strategic planning. There seems to be a rather broad, unbridged gap between the calls of Keller (1983) and others to assert "leadership" over loose coupling and other conventional conceptions of institutional organization, and the minimized discussion of leadership as seems to be the case in much chaos-related literature (e.g. Senge, 1990)

The use of consultants in planning was an emergent subtheme in this research. At Carson-Newman, a consultant's utilization was seen as key to success; at Blue Ridge Community College, the absence of one was a conscious and seemingly rewarded approach. The use of a consultant at the University of Calgary seemed to give the process momentum, continued energy, and fresh perspectives, but it may also have been a seminal source of institutional criticism of and resistance to the planning process and its products. CNC's consultant was an educational specialist, Calgary's was not, as neither was Red Deer's College. Further inquiry centered on the issues of consultancy may give indicators as to their effectiveness in nurturing "successful" planning efforts, and whether the choices of educational-specialist or general consultants yield contrasting patterns of perceived success.

The concept of "bifurcation" of internal constituencies was raised in the consideration of the University of Calgary, as there the divisions of support and opposition seemed particularly distinct and each rather robust. But at Blue Ridge, one of planning's most ardent supporters estimated core, ongoing opposition to planning there at as much of 30% of the faculty. "You're never going to get consensus," he said, "you just try to get close." Another person there acknowledged some individuals' efforts to "sabotage" planning efforts, particularly through inaction. At Carson-Newman College, support or opposition to institutional plans and planning efforts could be plotted on a conventional bell curve, said one person charged, among others, with ongoing planning and its monitoring. The consideration of support or opposition to planning within institutions is reminiscent of discussions of morale in higher education: What's "normal"? What's the baseline against which our efforts and climates are to be evaluated? Aren't informed skepticism and critical review valued characteristics of academe, but if this is so, how much is "too much?" Do we not set ourselves up for inevitable failure in accomplishment of consensus if our implicit standard is unanimity? Within strategic planning, what are the keys to minimizing—or paradoxically perhaps, using to advantage—opposition and a culture of critical doubt?

The long, involved planning efforts asserted or implied by this study's propositions raised a difficult issue in actual field practice: planning fatigue. How are the time and energy demands of planning to be balanced against daily responsibilities? President Terry White of Calgary advocates the energizing effects of "quick wins." Calgary has also invested substantial money in the process in order to free up individuals to concentrate on the process, but this is an option not available or acceptable in many institutional cultures or circumstances. What are other appropriate and helpful individual and institutional responses to the limitations of planning fatigue? And is there any correlation in the adoption of these responses and strategies, and perceived planning "success"?

The issue of "locus" of planning also is raised by this dissertation research. At the Red Deer College, it was within the board. At Blue Ridge College, it was within the faculty and staff. At the University of Calgary, it was dispersed among constituencies, but tended toward centering among emerging "professional planners," one might say. At Carson-Newman College, the locus was delegated to a consultant, but soon recentered within the faculty. These various experiences suggest the possibility of some categorization of locus in planning initiation and direction, and by extension some approaches for assessment of best practices in this key construct.

Finally, if these propositions have relevance with higher education, it is logical and likely that they have adaptable planning relevance beyond that sphere. The business world, for example, continues to grapple with the relevance and appropriate natures of strategic planning. These propositions expanded to consideration within corporate or other institutional contexts might provide not only assistance in planning, but further refinement of the propositions themselves for relevance outside of academe.

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APPENDICES

Appendix A — Informed Consent Form

Informed Consent Form
for participation in the research project
"The Implications of Chaos Theory for Strategic Planning"
Marc Cutright, Researcher

The purpose of this study to determine whether a model of strategic planning informed by chaos theory has application for planning and planners in higher education. The research and your participation will contribute to the researcher's doctoral dissertation.

The primary means of investigation will be personal interviews with individuals at several institutions of higher education. Public documents and other materials, obtained through proper authorization, may contribute to the analysis.

Your participation in this research is voluntary. You may decline to participate, or discontinue your participation at any time, without penalty or prejudice.

The study offers no direct benefit to you. However, the results of the research may be of benefit in future planning efforts at this institution or elsewhere, and they have the potential to help students and scholars better understand the practices of planning.

Your identity will be kept confidential. Audio tapings, notes, or other methods used to record interviews and comments will be protected under lock and key at the researcher's office, the University of Tennessee at Chattanooga. Any reference to you or your comments in any research report will not include your name or descriptors which are individually identifying. If the researcher should subsequently see value in such personal identification, you will be asked for explicit permission to make this identification. Failure by the researcher to secure such permission from you will prohibit your personal identification in any report.

If you later have any questions about the research, you may contact the researcher c/o University Relations, The University of Tennessee at Chattanooga, Chattanooga, TN 37403; telephone 423/755-4363. You may also contact the researcher's advisor, Dr. Jeffrey P. Aper, Leadership Studies Unit, College of Education, The University of Tennessee, Knoxville, TN 37996; telephone 423/974-2216.

* * * * *

I have read this explanation and agree to participate.

____
Name

____
Signature

____
Date

Appendix B — Interview protocol

The primary means of subject interaction with the researcher was personal interviews. Both notes and audio recordings were made during these interviews, with the consent of the interviewee. These interviews were be of the "informal conversational" type as described by Michael Quinn Patton (*Qualitative Evaluation and Research Methods*, 1990, pp. 277-368). The interviews were typically be one-half to one hour in length, typically at the interviewees office or other location comfortable and convenient to him or her.

Typical questions were, depending on the role of the subject in the planning process:

--How was information about the planning process shared with the campus community?

--Do you, as president, feel that the planning process has compromised your ability to make decisions?

--What success have you had in securing broad involvement of the campus in the planning process?

In addition to interviews, the researcher observed open planning meetings or meetings he had been given explicit, authoritative permission to observe. Documentary artifacts of the planning process (reports, memos, etc.) were considered as supplementary sources of information and as sources of triangulated confirmation of findings.

In no case was human in this research be subjected by the researcher to medical, physical, or mental stress, treatment or manipulation. No incentives was offered to subjects for their participation in the research.

VITA

William Marcus Cutright is a native of Champaign, Illinois, where he graduated from Champaign Central High School. He holds a bachelor of arts degree in American Studies from Lindenwood College (now Lindenwood University) of St. Charles, Missouri. His master of education degree is from North Georgia College (now North Georgia College and State University) of Dahlonega, Georgia.

His professional background has been concentrated in higher education institutional advancement, more particularly public relations, and he has held leadership positions in this function at, consecutively, MacCormac Junior College of Chicago, Northwestern University School of Law, North Georgia College, and the University of Tennessee at Chattanooga.

Doctoral studies in Leadership Studies in Education with a concentration in higher education were begun in 1993, and culminated with a doctoral degree awarded on May 14, 1999. The doctoral studies were marked as well by a Fulbright Scholarship to Canada and the University of Calgary during the 1996-1997 academic year.